

1	5	10	15
Leu Thr Ser Glu Asp Ala Val	Leu Asn Met Ala Ala Ser Leu Ser Gly		
20	25	30	
Trp Gln Glu Ala Ala Leu Val	Gly Leu Ala Ser Gly Met Thr Pro Glu		
35	40	45	
Gln Val Arg Gln Glu Leu Leu Glu Ser	Pro Glu Glu Leu Pro Glu Pro		
50	55	60	
Ser Lys Lys Gln His Gly His	Ala Ala Ser Pro Arg Glu Pro Asp Val		
65	70	75	80
Glu Leu Leu Glu Ser Leu Arg Arg	Pro Ala Ala Met Glu Phe Ala		
85	90	95	
Thr Ile Glu Gly Val Asp			
100			

<210> 229

<211> 743

<212> DNA

<213> Homo sapiens

<400> 229

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nnngctaggg acacggcctc ctccctcaaca ggcagtgcct gtgcaggctc aggggcatca
60
tcaaaagataa cacagggtctg gtcaggggct gctggctgct cctgccccag gactggctcc
120
aggatgggga aggtgcctc cctggtagcc agggggagag gggaaaggag caccaggagg
180
tgggcccagca ggtgtggcat cggccaggag gagatggagg ccagcagcag ccaagaccag
240
agtaaaagtgt ctgccccagg ggtgctcaca gcccaggacc gggtagttgg aaagccaggc
300
cagctttggca ctacgaggag ccaggaggga gatgttcagg actgggagtt cagaaaggag
360
gattccaggc gcacttactc cagccgggat gcagaactcc aggaccagga attcggaaaag
420
agagattcac tgggtaccta cagtagtcga gatgtaagcc ttggggactg ggaatttggg
480
aagagagatt ctctgggtgc ttatgccagc caagatgcca acgagcaggg ccaagatttg
540
gggaagaggg accaccatgg taggtacagc agccaggatg ccgatgagca ggactgggag
600
tttcagaaga gagatgtgtc actcggcacc tatggcagcc gggctgcgga gccacaggaa
660
caggagtgtt ggaagagcgc ttggataagg gactacagca gtggtggcag ctccaggacc
720
cttgacgccc aggacagaag ctt
743

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<210> 230

<211> 247

<212> PRT

<213> Homo sapiens

<400> 230

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Xaa Ala Arg Asp Thr Ala Ser Ser Ser Thr Gly Ser Ala Cys Ala Gly

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1	5					10					15				
Ser	Gly	Ala	Ser	Ser	Lys	Ile	Thr	Gln	Gly	Trp	Ser	Gly	Ala	Ala	Gly
20						25			30						
Cys	Ser	Cys	Pro	Arg	Thr	Gly	Ser	Arg	Met	Gly	Lys	Ala	Ala	Ser	Leu
35						40			45						
Val	Ala	Arg	Gly	Arg	Gly	Glu	Gly	Ser	Thr	Arg	Glu	Trp	Ala	Ser	Arg
50						55			60						
Cys	Gly	Ile	Gly	Gln	Glu	Glu	Met	Glu	Ala	Ser	Ser	Ser	Gln	Asp	Gln
65						70			75			80			
Ser	Lys	Val	Ser	Ala	Pro	Gly	Val	Leu	Thr	Ala	Gln	Asp	Arg	Val	Val
85						90			95						
Gly	Lys	Pro	Ala	Gln	Leu	Gly	Thr	Gln	Arg	Ser	Gln	Glu	Ala	Asp	Val
100						105			110						
Gln	Asp	Trp	Glu	Phe	Arg	Lys	Arg	Asp	Ser	Gln	Gly	Thr	Tyr	Ser	Ser
115						120			125						
Arg	Asp	Ala	Glu	Leu	Gln	Asp	Gln	Glu	Phe	Gly	Lys	Arg	Asp	Ser	Leu
130						135			140						
Gly	Thr	Tyr	Ser	Ser	Arg	Asp	Val	Ser	Leu	Gly	Asp	Trp	Glu	Phe	Gly
145						150			155			160			
Lys	Arg	Asp	Ser	Leu	Gly	Ala	Tyr	Ala	Ser	Gln	Asp	Ala	Asn	Glu	Gln
165						170			175						
Gly	Gln	Asp	Leu	Gly	Lys	Arg	Asp	His	His	Gly	Arg	Tyr	Ser	Ser	Gln
180						185			190						
Asp	Ala	Asp	Glu	Gln	Asp	Trp	Glu	Phe	Gln	Lys	Arg	Asp	Val	Ser	Leu
195						200			205						
Gly	Thr	Tyr	Gly	Ser	Arg	Ala	Ala	Glu	Pro	Gln	Glu	Gln	Glu	Phe	Gly
210						215			220						
Lys	Ser	Ala	Trp	Ile	Arg	Asp	Tyr	Ser	Ser	Gly	Gly	Ser	Ser	Arg	Thr
225						230			235			240			
Leu	Asp	Ala	Gln	Asp	Arg	Ser									
245															

<210> 231

<211> 431

<212> DNA

<213> Homo sapiens

<400> 231

acgcgttggc caccgagagg ctggcgaggg tgtgcagcac ggcgcagtg ggcagsgtcc
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cagggtcgac cctgcgcagc agctctccca tcaccttgct gatgaactgt ctccccacgg
120
ccaccaggac gccactcgcc gcctgctgcc agtccagac caggtctctc gtcttggtca
180
tctctctgga ggcacgagg atgatggtgc tggctgtgtc cttgtccacg tcactggcgc
240
gactgctcag gacctctctc atggccctca ggaccgtgc tcggtatggg tgtgcacagt
300
tgtcatgctg ccgcagatac tctctcgagg caccggagcgt ctccaccctg ctggacgcca
360
tcaccgataa ggacccctcg gtgcaggagc aggtctgcag tgccctgtgc tcctctgggg
420
aggtgcggcc g
431

<210> 232
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 232
 Met Ala Ser Ser Arg Val Glu Thr Leu Arg Ala Cys Glu Glu Tyr Leu
 1 5 10 15
 Arg Gln His Asp Lys Leu Ala His Pro Tyr Arg Ala Ala Val Leu Arg
 20 25 30
 Ala Met Glu Arg Val Leu Ser Ser Arg Ala Ser Glu Leu Asp Lys Asp
 35 40 45
 Thr Ala Ser Thr Ile Ile Leu Leu Ala Ser Ser Glu Met Thr Lys Thr
 50 55 60
 Lys Asp Leu Val Trp Asp Trp Gln Gln Ala Ala Ser Gly Val Leu Val
 65 70 75 80
 Ala Val Gly Arg Gln Phe Ile Ser Lys Val Met Glu Glu Leu Leu Arg
 85 90 95
 Arg Leu His Pro Gly Thr Leu Pro His Cys Ala Val Leu His Thr Leu
 100 105 110
 Ala Ser Leu Ser Val Ala Asn Ala
 115 120

<210> 233
 <211> 606
 <212> DNA
 <213> Homo sapiens

<400> 233
 acgcgttcag ggatgccaga aatctaactg ggtaataaaa agctgggaga acattccaga
 60
 aagggtgggca cccttagcat tcccaaaaag caccagccct cctcatcctt cccagcttct
 120
 gtgctggaat gcacccccat cggaaaggct cgaaaactca ggacacatta ggatcacctg
 180
 gaaagcattt gtcaaaacgc atctccctgc gggtcagggt ccaagttaaa atcaaaacttc
 240
 aggtgatgct gactcagggt gctccagaaa cacctgggga agcagcactt tggaggctgc
 300
 ctctcacatc caccaccacag caagtgggca gggagctagg taaatctcct tccagttga
 360
 gaaggggctc ggagcaggca cagagaagag atacccttag aatgcaagtt gtccagctgc
 420
 gaaagtccag cctgcaggct tcctggggca gctagtgggc tgaagtatgc cacagcaaca
 480
 ggcttctaga gccggctgcc cagctcctac tctgcctctg ccaactcactg actgtgtggg
 540
 cttgagcagg tcacctgtct gacttggtga gagctgacag gcatacacctg ttagaggctt
 600
 acgcgt
 606

<210> 234

<211> 108

<212> PRT

<213> Homo sapiens

<400> 234

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Met His Pro His Arg Lys Gly Ser Lys Thr Gln Asp Thr Leu Gly Ser
 1             5             10             15
Pro Gly Lys His Leu Ser Lys Arg Ile Ser Leu Arg Val Arg Val Gln
 20             25             30
Val Lys Ile Lys Leu Gln Val Met Leu Thr Gln Val Ala Pro Glu Thr
 35             40             45
Pro Gly Glu Ala Ala Leu Trp Arg Leu Pro Leu Thr Ser Thr Pro Gln
 50             55             60
Gln Val Gly Arg Glu Leu Gly Lys Ser Pro Ser Gln Leu Arg Arg Gly
 65             70             75             80
Ser Glu Gln Ala Gln Arg Arg Asp Thr Leu Arg Met Gln Val Val Gln
 85             90             95
Leu Arg Lys Ser Ser Leu Gln Ala Ser Trp Ala Ser
100             105

```

<210> 235

<211> 328

<212> DNA

<213> Homo sapiens

<400> 235

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cgaccgttga ctattctctc caaaccacaa agacaatgat tgatttaact gaatttagaa
 60
atagcaaaaca cttaaaacag cagcagtaca gagctgaaaa ccagattctt ttgaaagaga
120
ttgaaagtct agaggaagaa cgacttgatc tgaaaaaaaa aattcgccaa atggctcaag
180
aaagaggaaa aagaagggca acttcaggat taacctactgg ggacctgaac ctaactgaaa
240
acattttctc aggagataga ataagtgaaa gaaaattgga ttatttgagc ctcaaaaaata
300
tgagtgaagc acaatcaaag aatgaatt
328

```

<210> 236

<211> 97

<212> PRT

<213> Homo sapiens

<400> 236

```

Met Ile Asp Leu Thr Glu Phe Arg Asn Ser Lys His Leu Lys Gln Gln
 1             5             10             15
Gln Tyr Arg Ala Glu Asn Gln Ile Leu Leu Lys Glu Ile Glu Ser Leu
 20             25             30
Glu Glu Glu Arg Leu Asp Leu Lys Lys Lys Ile Arg Gln Met Ala Gln
 35             40             45
Glu Arg Gly Lys Arg Arg Ala Thr Ser Gly Leu Thr Thr Gly Asp Leu
 50             55             60
Asn Leu Thr Glu Asn Ile Ser Gln Gly Asp Arg Ile Ser Glu Arg Lys

```

65		70		75		80
Leu	Asp	Leu	Leu	Ser	Leu	Lys
				85	Asn	Met
					90	Ser
						Glu
						Ala
						Gln
						Ser
						Lys
						Asn
						95

Glu

<210> 237
 <211> 2059
 <212> DNA
 <213> Homo sapiens

<400> 237
 ggccataagg gcacgacgca ttccctagccg atgcaccaac acgggcatga agcctgccga
 60
 gaggacgaag ccggcggtcca tagctacggc ccatacggtc atgtctgccg tggtctcggt
 120
 gatgtcagac tgcacatgaa atcgggttacg gtaccccgagg atcatcgcta ccgagtagcac
 180
 ccggaacagc acccgctggg cgccgacacg cgtgaggagg tgccccacca ttggcacttt
 240
 tcttagatag cggaaacccat ccaccacatc cccagtcacc gttctcatcg tccgggaacg
 300
 atcccaccagt ggcgcccaa gctcccgacg tgaaaactgc agcccctagg cgaccgagac
 360
 tgcgaagagg gctgcggaga tgcagaaaat gatcgtgtcg gcgtggtgca caggaatatg
 420
 gcgtccggca atcatgcgca ctgctgcagc aacaaccgca ccgatcatga gccctagcgg
 480
 ccaatcgttg gcatgattga cgtatccgtc aggtatgcg gcttctcgat ggtgtattcc
 540
 aacccagcga ccaaggcggg gagcaaaaac cggttcaggc tcatcgcgat gagcaaccca
 600
 atgagcaagg ccagggtggg gggcttatcg gcgcgaccac ccagaccaa gatccccagc
 660
 ccgacccagg tgacggcacg cattcatctg cgtattgtcc cgactacacc gtgagggcgc
 720
 tctctgatct gcagctcatc aagggttacg gactgcagta cctcaatgca ctctctggcta
 780
 cccgagccca gaacctgcc aagtcctctg agaacaccga cctgcagggt attccaggca
 840
 gccagaccag gctccttggt gagaagacca ccacagcggc agctttccca gtagcccttt
 900
 ccctcttttg cacagttgga acctccagtt gataaatgac tgtggactag cgcgcgtttt
 960
 ttgttttcag agcacacgta aggggtccagc cacagcaggc ccggcgctccc ggtggaaggc
 1020
 agccctgggc ggaacccagg cgtttaacgg ctactaggc agcccagat ctggggaagc
 1080
 agatgagcac gtggggagct ggagttagct gagcagaagt tttgtgccg cctgccccca
 1140
 tcccctcag gccacgtttt agatggccct ttagtttgcg ggtctctgggt gtccctcagaa
 1200
 ctgacacatca atgcctggat ccttcagccg gccctgccct cctttaggag acaggagtca
 1260

ccagggcaca gccctccagg cccgcctcag gaaggaatga aaggaatgcc atcatctcta
 1320
 gttcccaggg cccagccttc ccttctctcc cgggggcagg gacagtgcgg catattcaga
 1380
 ttcagacctc tttgggctga gccaccttgt gagtgcagtt actgcctttg tgtggccgtg
 1440
 acctctattt gtttgccttt aatttgccaa cctatcgctg ctggcagcac tttttgagca
 1500
 agccgagagc acccattttg gctggggatt cagatcgatg gccttgccca tgttgcctt
 1560
 tctggcttcc ctgatggtgt catgtttcag cgcgatgcgc ccagccttcc ccatgtgcc
 1620
 aaccagaagc tccactgccc gtaggctgtc cctgtagccc tgctccctcc ctggaggctg
 1680
 ctcttctgat tctgagagct ggcttagtgg tgcctgaggc cctttctgc ttctctgccc
 1740
 acctgctgag ttgccactcg cagtgttgtc agttcccgctg ttctgagaga aggtcatgcc
 1800
 tgggaggaa ggcacgtcat gctgcacga atcctctctc cgccgtgtgt cccccaggag
 1860
 agtagctgcc tgttgacact gctccacacc tccccacagc ctccctgcag gtgctgtgtg
 1920
 gccgtgatgt gcagagagca gtgaggagg gttcatgaac caggtggatc ctcttataaa
 1980
 aaaaaaaaaa tttttgttat atctctaaaa tcccatagct aggaacagaa aaaaaggaaa
 2040
 agacttgaaa tggtctaga
 2059

<210> 238

<211> 129

<212> PRT

<213> Homo sapiens

<400> 238

Ala Glu Gln Lys Phe Cys Ala Arg Leu Pro Pro Ser Pro Pro Gly His
 1 5 10 15
 Val Leu Asp Gly Pro Cys Ser Cys Gly Ser Trp Val Ser Ser Glu Leu
 20 25 30
 Asp Ile Asn Ala Trp Ile Leu Gln Pro Ala Leu Pro Ser Phe Arg Arg
 35 40 45
 Gln Glu Ser Pro Gly His Ser Pro Pro Gly Pro Pro Gln Glu Gly Met
 50 55 60
 Lys Gly Met Pro Ser Ser Leu Val Pro Arg Ala Gln Pro Ser Pro Ser
 65 70 75 80
 Pro Pro Gly Gln Gly Gln Cys Gly Ile Phe Arg Phe Arg Pro Leu Trp
 85 90 95
 Ala Glu Pro Pro Cys Glu Cys Ser Tyr Cys Leu Cys Val Ala Val Thr
 100 105 110
 Ser Ile Cys Leu Leu Leu Ile Cys Gln Pro Ile Ala Ala Gly Ser Thr
 115 120 125
 Phe

<210> 239
 <211> 388
 <212> DNA
 <213> Homo sapiens

<400> 239
 ntctagatca ctctgttagcg catgggtaaa tgctgacaca atagaaaagt gogaggacat
 60
 cctcgaatta atgagatggg ggactggatg agtcaagttc tcgtcgttgc gggcggtgtc
 120
 ggtcagctgc cctcctccca cttctgcttc tcggcggtac ccatacogt attggcgcg
 180
 tgttcacett tgaatgcagc catgtcgtcg tctcgtatc gaaatgatgt gccatcgaag
 240
 atgccgacct cagcatcggc atctgcagtg atgagtgcgt atcgcgccac acgaaacgcc
 300
 cagcgcaacc gtgtcctcgc acgatacgaa gtgcttgggt atctcagctc tggtaacctat
 360
 ggctcgtgtat ataaagcaaa ggaacttn
 388

<210> 240
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 240
 Met Val Asp Trp Met Ser Gln Val Leu Val Val Ala Ala Ala Val Gly
 1 5 10 15
 Gln Leu Pro Leu Leu His Phe Cys Phe Ser Ala Leu Pro His Thr Val
 20 25 30
 Leu Ala Ala Cys Ser Pro Leu Asn Ala Ala Met Ser Ser Ser Pro Tyr
 35 40 45
 Arg Asn Asp Val Pro Ser Lys Met Pro Thr Ser Ala Ser Ala Ser Ala
 50 55 60
 Val Met Ser Ala Tyr Arg Ala Thr Arg Asn Ala Gln Arg Asn Arg Val
 65 70 75 80
 Leu Ala Arg Tyr Glu Val Leu Gly Tyr Leu Ser Ser Gly Thr Tyr Gly
 85 90 95
 Arg Val Tyr Lys Ala Lys Glu Leu
 100

<210> 241
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 241
 ncggggggcc gagttgaaag ctgcgggcac actggctgtg ctgcttgcct cactctctcg
 60
 gatgctgctt ccaggcgagg cctgggggaa acatcggcct tccaggccac ccttagcccg
 120
 tcccatctgg gggcccttag cacagtcctt gggaccccac atgctgcctt tcaggctgat
 180

gtgggcaaac tcggcagccc agcctactcc cgggccatgg gccaccatct cagcttccct
 240
 ggggctaage cgtgtgctct gaatcaaaag cagtagtggc atcggcgcca ctggcgccat
 300
 gggaacggg ttgacttgca caaccagcac
 330

<210> 242
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 242
 Met Ala Pro Val Pro Pro Met Pro Leu Leu Leu Ile Gln Ser Thr
 1 5 10 15
 Arg Leu Ser Pro Arg Glu Ala Glu Met Val Ala His Gly Pro Gly Val
 20 25 30
 Gly Trp Ala Ala Glu Phe Ala His Ile Ser Leu Lys Gly Ser Met Trp
 35 40 45
 Gly Pro Arg Asp Cys Ala Lys Gly Pro Gln Met Gly Arg Ala Lys Gly
 50 55 60
 Ala Trp Glu Gly Arg Cys Phe Pro Gln Ala Arg Pro Gly Ser Ser Ile
 65 70 75 80
 Pro Arg Ser Glu Ala Ser Ser Thr Ala Ser Val Pro Ala Ala Phe Asn
 85 90 95
 Ser Ala Pro Arg
 100

<210> 243
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 243
 nnacctcttc tcgcggttat taccaaagat gctatgcacg taactgcgga ggaaattctt
 60
 cacacaggcc accccgcccc cactgcgctc gtcgctaate ttccctataa cgttgcggtg
 120
 ccggtactgc tacacatgct agatattctc cctcctctgc ggactacagt ggtgatgggt
 180
 caggcagaag tagccgatcg attggctgcc acaccaggca gccgcattta cgggtgcccc
 240
 agcggtcaaa tcaactttta cgggactgtc tcgctgcgg gagcaattgg acgcaatgtc
 300
 ttctggccgg ctcccaatgt tgattctggn
 330

<210> 244
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 244
 Xaa Pro Ser Leu Arg Val Ile Thr Lys Asp Ala Met His Val Thr Ala

```

      1             5             10             15
Glu Glu Ile Leu His Thr Gly His Pro Ala Pro Thr Ala Leu Val Ala
      20             25             30
Asn Leu Pro Tyr Asn Val Ala Val Pro Val Leu Leu His Met Leu Asp
      35             40             45
Ile Leu Pro Ser Leu Arg Thr Thr Val Val Met Val Gln Ala Glu Val
      50             55             60
Ala Asp Arg Leu Ala Ala Thr Pro Gly Ser Arg Ile Tyr Gly Val Pro
      65             70             75             80
Ser Val Lys Val Asn Phe Tyr Gly Thr Val Ser Arg Ala Gly Ala Ile
      85             90             95
Gly Arg Asn Val Phe Trp Pro Ala Pro Asn Val Asp Ser Gly
      100             105             110

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<210> 245

<211> 355

<212> DNA

<213> Homo sapiens

<400> 245

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tctagatcct gaatcaccca cctcctagtt tcggattcac ctccgccggc gtcacctgaa
60
aacaatgtcg agcccgaaatg gatgatggta gccacaccca tctcggaag gtggaatgca
120
gcgtgttgca gaaacagaag ttgaccgtcg gaggtaggcg gcattcgctt cggatcgaa
180
cgtcccgagg catccatctc gagttgaaga cgaataatctt tccagtccac gccgtagggg
240
ganttgacaa ccacagcatc gaatttgcc agaaggaagt ggtagttggt gagggtattg
300
ccccattcaa tacgcgcac ttcccggaag cgcgcctcta ttgcggccaa cgcgt
355

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<210> 246

<211> 101

<212> PRT

<213> Homo sapiens

<400> 246

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Met Arg Val Leu Asn Gly Ala Ile Pro Ser Pro Thr Thr Thr Ser Phe
1             5             10             15
Trp Thr Asn Ser Met Leu Trp Leu Pro Xaa Pro Pro Thr Ala Trp Thr
      20             25             30
Gly Lys Ile Phe Val Val Asn Ser Arg Trp Met Pro Arg Asp Ala Ser
      35             40             45
Ile Arg Ser Glu Cys Arg Leu Pro Pro Thr Val Asn Phe Cys Phe Cys
      50             55             60
Asn Thr Leu His Ser Thr Phe Pro Arg Trp Val Trp Leu Pro Ser Ser
      65             70             75             80
Ile Arg Ala Arg His Cys Phe Gln Val Thr Pro Ala Glu Val Asn Pro
      85             90             95
Lys Leu Gly Gly Gly
      100

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<210> 247
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 247
 atggccgcga atgggcaccg tgtcatggtc gtctctcccc gctacgacca gtacaaggac
 60
 gctctggaca ccagcgtcgt gtccgagatc aagatgggag acaggtacga gacggctcagg
 120
 ttcttccact gctacaagcg cggagtggac cgcgtgttcg ttgaccaccc actgttctcg
 180
 gagaggggttt ggggaaagac cgaggagaag atctacgggc ctgacgctgg aacggactac
 240
 agggacaacc agctgcggtt cagcctgcta tgccaggcag cacttgaagc tccaaggatc
 300
 ctgagcctca acaacaaccc atacttctcc gga
 333

<210> 248
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 248
 Met Ala Ala Asn Gly His Arg Val Met Val Val Ser Pro Arg Tyr Asp
 1 5 10 15
 Gln Tyr Lys Asp Ala Trp Asp Thr Ser Val Val Ser Glu Ile Lys Met
 20 25 30
 Gly Asp Arg Tyr Glu Thr Val Arg Phe Phe His Cys Tyr Lys Arg Gly
 35 40 45
 Val Asp Arg Val Phe Val Asp His Pro Leu Phe Leu Glu Arg Val Trp
 50 55 60
 Gly Lys Thr Glu Glu Lys Ile Tyr Gly Pro Asp Ala Gly Thr Asp Tyr
 65 70 75 80
 Arg Asp Asn Gln Leu Arg Phe Ser Leu Leu Cys Gln Ala Ala Leu Glu
 85 90 95
 Ala Pro Arg Ile Leu Ser Leu Asn Asn Pro Tyr Phe Ser Gly
 100 105 110

<210> 249
 <211> 5503
 <212> DNA
 <213> Homo sapiens

<400> 249
 atgacccagg ggattttggc cttggtcacg tccactggct gtgcatctgc caatgccctg
 60
 cagtccctca cggatgccat gcacatccca cacctctttg tccagcgcaa cccggagggg
 120
 tcgcccagca ccgcatgcc cctgaacccc agccccgatg gtgaggccta cacactggct
 180
 tcgagaccac ccgtccgcct caatgatgtc atgctcaggc tggtgacgga gctgcgctgg
 240

cagaagttctg tcattgttcta cgacagcgag tatgatattcc gtgggcttca aagctttctg
300
gaccaggcct cgcggctggg ccttgacgtc tctttacaaa aggtggacaa gaacattagc
360
cacgtattca ccagcctggt caccacgatg aagacagagg agctgaatcg ctaccgggac
420
acgcttcgcc gcgccatcct gctgctcagc ccacaggggag cccactcctt catcaacgag
480
gccgtggaga ccaacctggc ttccaaggac agccactggg tctttgtgaa tgagggaatc
540
agtgaccccg agatcctgga tctgggtccat agtgcccttg gaaggatgac cgtgggtccg
600
caaatctttc cgtctgcaaa ggacaatcag aaatgcacga ggaacaacca cgcgatctcc
660
tcctctgctc gcgaccccca ggaaggctac ctccagatgc tgcagatctc caacctctat
720
ctgtatgaca gtgttctgat gctggccaac gcctttcaca ggaagctgga ggaccggaa
780
tgccatagca tggcgagcct caactgcata cggaaatcca ctaagccatg gaattggtgg
840
aggtccatgc tggtatccat caaaaagggc cacatcactg gcctcactgg ggtgatggag
900
tttcggggag acagttcgaa tccctatgtc cagtttgaaa tccttgaccac tacctatagt
960
gagacttttg gcaaagacat gcgcaagttg gcgacatggg actcagagaa gggcttgaat
1020
ggcagcttgc aagagaggcc catgggcagc gcctcccaag gattgactct taaagtggg
1080
actgtcttgg aagagccttt cgtgatgggt gctgagaaca tcctaggaca gcccaggcgc
1140
tacaaagggt tctccataga tgtcctggat gcactggcca aggcctctgg ctttaaatat
1200
gagatttacc aagccccgta tggcaggtag ggtcaccagc tccataacac ctccctggaa
1260
gggatgatgc gggagctcat cagcaagaga gcgacttgg ccactctcgc catcaccatc
1320
acccagaga gggagagcgt tgtggacttc agcaagcggc acatggacta ttcagtggg
1380
attctaatta agaagccga ggagaaaatc agcatcttct cctctcttgc tccatttgat
1440
ttcgtgtgtt gggcctgcat tgcagcagcc atccctgtgt ttggtgtgt gatatttgt
1500
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<211> 927

<212> PRT

<213> Homo sapiens

<400> 250

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Phe	Val	Gln	Arg	Asn	Pro	Gly	Gly	Ser	Pro	Arg	Thr	Ala	Cys	His	Leu
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Asn	Pro	Ser	Pro	Asp	Gly	Glu	Ala	Tyr	Thr	Leu	Ala	Ser	Arg	Pro	Pro
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Val	Arg	Leu	Asn	Asp	Val	Met	Leu	Arg	Leu	Val	Thr	Glu	Leu	Arg	Trp
65					70				75				80		
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				85					90				95		
Gln	Ser	Phe	Leu	Asp	Gln	Ala	Ser	Arg	Leu	Gly	Leu	Asp	Val	Ser	Leu
			100				105					110			
Gln	Lys	Val	Asp	Lys	Asn	Ile	Ser	His	Val	Phe	Thr	Ser	Leu	Phe	Thr
			115				120					125			
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Ala	Val	Glu	Thr	Asn	Leu	Ala	Ser	Lys	Asp	Ser	His	Trp	Val	Phe	Val
				165					170				175		
Asn	Glu	Glu	Ile	Ser	Asp	Pro	Glu	Ile	Leu	Asp	Leu	Val	His	Ser	Ala
			180				185					190			
Leu	Gly	Arg	Met	Thr	Val	Val	Arg	Gln	Ile	Phe	Pro	Ser	Ala	Lys	Asp
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225					230				235					240	
Leu	Tyr	Asp	Ser	Val	Leu	Met	Leu	Ala	Asn	Ala	Phe	His	Arg	Lys	Leu
				245				250					255		
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Ser	Ile	Asp	Val	Leu	Asp	Ala	Leu	Ala	Lys	Ala	Leu	Gly	Phe	Lys	Tyr																						
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Glu	Ile	Tyr	Gln	Ala	Pro	Asp	Gly	Arg	Tyr	Gly	His	Gln	Leu																								

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705                710                715                720
Lys Trp Trp Pro His Met Gly Arg Cys Asp Leu Thr Ser His Ala Ser
        725                730                735
Ala Gln Ala Asp Gly Lys Ser Leu Lys Leu His Ser Phe Ala Gly Val
        740                745                750
Phe Cys Ile Leu Ala Ile Gly Leu Leu Leu Ala Cys Leu Val Ala Ala
        755                760                765
Leu Glu Leu Trp Trp Asn Ser Asn Arg Cys His Gln Glu Thr Pro Lys
        770                775                780
Glu Asp Lys Glu Val Asn Leu Glu Gln Val His Arg Arg Met Asn Ser
785                790                795                800
Leu Met Asp Glu Asp Ile Ala His Lys Gln Ile Ser Pro Ala Ser Ile
        805                810                815
Glu Leu Ser Ala Leu Glu Met Gly Gly Leu Ala Pro Thr Gln Thr Leu
        820                825                830
Glu Pro Thr Arg Glu Tyr Gln Asn Thr Gln Leu Ser Val Ser Thr Phe
        835                840                845
Leu Pro Glu Gln Ser Ser His Gly Thr Ser Arg Thr Leu Ser Ser Gly
        850                855                860
Pro Ser Ser Asn Leu Pro Leu Pro Leu Ser Ser Ser Ala Thr Met Pro
865                870                875                880
Ser Met Gln Cys Lys His Arg Ser Pro Asn Gly Gly Leu Phe Arg Gln
        885                890                895
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<211> 291
<212> DNA
<213> Homo sapiens

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<210> 252
<211> 97
<212> PRT
<213> Homo sapiens

<400> 252
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Ser Leu Arg Glu Asp Val Asn Ala Leu Glu Arg Leu Arg Leu Ala Val
      20           25           30
Arg Ala Ser Val Val Ile Leu Ile Glu Tyr His His Ser Val Thr Leu
      35           40           45
Leu Leu Arg Val Arg Gly Asn Ser Pro Leu Glu Arg Glu Ala Leu Glu
      50           55           60
Ala Arg Arg Arg Ile Asp Ala Lys Val Pro Ala Leu Val Glu Ser Ala
      65           70           75           80
Ile Ala Glu Gly Gly Leu Arg Ser Asp Phe Thr Pro Gly Leu Ile Thr
      85           90           95
Arg

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<210> 253

<211> 327

<212> DNA

<213> Homo sapiens

<400> 253

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ccccatgtgc ggcagtgatg gcgggcacct tgcggggagaa ggccgggaag gtcgagcgag
180
ccaatgaccg tcgcacgggc gccacgctcc acgagcggga cgagaagctc gcggcaggac
240
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327

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<210> 254

<211> 106

<212> PRT

<213> Homo sapiens

<400> 254

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      20           25           30
Arg Ser Thr Asn Arg Ala His Met Ser Ala Val Met Ala Gly Thr Leu
      35           40           45
Arg Glu Lys Ala Gly Lys Val Glu Arg Ala Asn Asp Arg Arg Thr Val
      50           55           60
Gly Thr Leu His Glu Arg Asp Glu Lys Leu Ala Ala Gly Arg Ser Leu
      65           70           75           80
Val Ala Val Ser Ser Ala Val Ser Ile Thr Val Pro Ala Thr Trp Asn
      85           90           95
Ala His Asp Phe Gly Arg Arg Leu Asp Ala
      100           105

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 <212> DNA
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 atcgagctaa ctctgctgctt aaagaaagac agcagcacag cagaaatccc tgttattttta
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<210> 256
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 256
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 20 25 30
 Trp Met Met Pro Gly Gly Ser Gly Ile Glu Leu Thr Arg Arg Leu Lys
 35 40 45
 Lys Asp Ser Thr Thr Ala Glu Ile Pro Val Ile Leu Leu Thr Ala Lys
 50 55 60
 Ser Glu Glu Asp Asn Lys Ile Gln Gly Leu Glu Val Gly Ala Asp Asp
 65 70 75 80
 Tyr Ile Thr Lys Pro Phe Ser Pro Arg Glu Leu Val Ala Arg Leu Lys
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 Ala Val Leu Arg Arg Ala Thr Pro Gln Gly Ile Asp Asp Pro Ile Glu
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 Ile Asp Gly Leu Thr Leu Asp Pro Ile Ser Gln Arg
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<210> 257
 <211> 639
 <212> DNA
 <213> Homo sapiens

<400> 257
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<210> 258

<211> 213

<212> PRT

<213> Homo sapiens

<400> 258

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 35 40 45
 Phe Gly Leu Pro Thr Met Ala Thr Ser Asn Pro Met Phe Gly Arg Val
 50 55 60
 Arg Glu Trp Leu Asp Ala Val Pro Ala Lys Asp Pro Ser Ser Ile Ser
 65 70 75 80
 Leu Ala His Ser Lys Ala Gly Leu Asn Glu Glu Tyr Gln Gln Leu Met
 85 90 95
 Pro Trp Asn Ala Thr Met Ala Val Tyr Asp Glu Gly Ala Gly Thr Gln
 100 105 110
 Arg Glu Ala Ser Ala Ile Val His Glu Trp Phe Leu Gly Arg Lys Arg
 115 120 125
 Ala Ile Leu Ala Asp His Val Val Gly Thr Ile Asp Gln Ala Leu Phe
 130 135 140
 Thr Gly Leu Lys Ala Lys His Val Val Leu Arg His Leu Gly Leu Ala
 145 150 155 160
 Ser Lys Val Val Ile Ile Asp Glu Val His Ala Ala Asp Val Tyr Met
 165 170 175
 Arg Glu Tyr Leu Lys Val Val Leu Glu Trp Leu Gly Ala Tyr Arg Thr
 180 185 190
 Pro Val Ile Leu Met Ser Ala Thr Leu Pro Pro Ala Gln Arg His Glu
 195 200 205
 Leu Ala Leu Ala Tyr
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<210> 259
 <211> 252
 <212> DNA
 <213> Homo sapiens

<400> 259
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<210> 260
 <211> 84
 <212> PRT
 <213> Homo sapiens

<400> 260
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 20 25 30
 Val Met Cys Thr Cys Ala Xaa Val Cys Xaa Cys Val Cys Met Xaa Val
 35 40 45
 Cys Thr Cys Ala Leu Xaa Cys Gly Val Tyr Ala Trp Cys Val His Met
 50 55 60
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<210> 261
 <211> 1202
 <212> DNA
 <213> Homo sapiens

<400> 261
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 420
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<210> 262

<211> 214

<212> PRT

<213> Homo sapiens

<400> 262

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 35 40 45
 Ile Phe Ser Glu Asp Pro Ser Trp Ser Ser Ala Thr Gly Thr Val Tyr
 50 55 60
 Leu Ala Ser Leu Val Leu Ala Ile Met Ile Leu Pro Ile Ile Thr Ala
 65 70 75 80
 Val Ser Arg Asp Val Met Pro Arg Thr Pro His Asp Gln Val Glu Ala
 85 90 95
 Ala Leu Ala Leu Gly Ser Thr Arg Trp Glu Val Ile Lys Leu Ala Val
 100 105 110
 Phe Pro His Ser Arg Ser Gly Ile Ile Ser Gly Ser Met Leu Gly Leu
 115 120 125
 Gly Arg Ala Leu Gly Glu Thr Leu Ala Val Thr Leu Ile Leu Gln Thr

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      130              135              140
Met Ser Pro Met Ala Leu Lys Gln Asn Leu Asn Leu Ser Ile Phe Val
145              150              155              160
Gly Gly Glu Thr Phe Ala Ser Lys Ile Ala Gly Asn Phe Ser Glu Ala
      165              170              175
Ile Ser Asp Pro Thr Ser Leu Gly Ala Leu Val Ala Ser Ala Leu Ala
      180              185              190
Leu Phe Val Ile Thr Phe Val Val Asn Ala Thr Ala Arg Leu Ile Ala
      195              200              205
Ala Lys Gly Val Lys Arg
      210

```

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<210> 263
<211> 424
<212> DNA
<213> Homo sapiens

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<400> 263
acgcgtgagt gctctgcgct ggaacaacg gtgatagagc ccatccgcg tgaactttcc
60
gacgtggtgc tcgtgaacaa gctcgaaaag tatgtacgag aacgtacctc ggaagacggt
120
gcgcacatgg aagaggatgc ggaccagacg ggcaacgaca tcctcacgac gatcctgctg
180
tcgaactggg atccactatt ggatatgacg acgcaggatc atgtgctggc catgcaaaag
240
gcttatatgg cctcgccatt ccgtgccaat ttggacctgg catacccatc ttgcagcgca
300
caggccagtc cccagccggc gatgcgcgcg tgggagacag ggacctcagc cagtagcatg
360
gcggatgctc gtgaatttgc gctgctgaag ctgtacctgc gtagcttgct gcagaagcac
420
gann
424

```

```

<210> 264
<211> 99
<212> PRT
<213> Homo sapiens

```

```

<400> 264
Met Glu Glu Asp Ala Asp Gln Thr Gly Asn Asp Ile Leu Thr Thr Ile
1      5      10      15
Leu Leu Ser Asn Trp Asp Pro Leu Leu Asp Met Thr Thr Gln Asp His
20     25     30
Val Leu Ala Met Gln Lys Ala Tyr Met Ala Ser Pro Phe Arg Ala Asn
35     40     45
Leu Asp Leu Ala Tyr Pro Ser Ser Thr Pro Gln Ala Gln Ser Gln Pro
50     55     60
Ala Met Pro Pro Trp Glu Thr Gly Thr Ser Ala Ser Ser Met Ala Asp
65     70     75     80
Ala Arg Glu Phe Ala Leu Leu Lys Leu Tyr Leu Arg Ser Leu Leu Gln
85     90     95
Lys His Xaa

```

<210> 265
 <211> 360
 <212> DNA
 <213> Homo sapiens

<400> 265
 ncgtacggcc ctggcgctcog catggacgag ggataccatt cgggcatgac ggtgcgggg
 60
 gccttcgact cctcatcgg caagctcgc atcactgggtg atagccgtga gcaagccctg
 120
 gctcgagctg ccgcgcctc cgacgaaatc gtcacgacg gcatgcccac ggtcattccc
 180
 ttaccacagg cgggtggtca cgacccggct ttcactgccc ccgacggctg cttcggcgtc
 240
 ttaccgact ggatcgaaac cgagttcgac aacaagatcg agccatacac cgggtctctg
 300
 ggccagctctg ccaattccga gcctcctcgt gaggtctcgt tcgagggtcaa cggtaaacgc
 360

<210> 266
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 266
 Xaa Tyr Gly Pro Gly Val Arg Met Asp Glu Gly Tyr His Ser Gly Met
 1 5 10 15
 Thr Val Pro Gly Ala Phe Asp Ser Leu Ile Gly Lys Leu Ile Ile Thr
 20 25 30
 Gly Asp Ser Arg Glu Gln Ala Leu Ala Arg Ala Ala Arg Ala Leu Asp
 35 40 45
 Glu Ile Val Ile Asp Gly Met Pro Thr Val Ile Pro Phe His Gln Ala
 50 55 60
 Val Val His Asp Pro Ala Phe Thr Ala Ala Asp Gly Cys Phe Gly Val
 65 70 75 80
 Phe Thr Asp Trp Ile Glu Thr Glu Phe Asp Asn Lys Ile Glu Pro Tyr
 85 90 95
 Thr Gly Ser Leu Gly Glu Ser Ala Asn Ser Glu Pro Pro Arg Glu Val
 100 105 110
 Val Val Glu Val Asn Gly Lys Arg
 115 120

<210> 267
 <211> 471
 <212> DNA
 <213> Homo sapiens

<400> 267
 natcctcaac gtgtgttccag ttccacgcga aagatcatgt tcgtcatcgg atcgatgccg
 60
 ttaacgcac ctagtcaatc caccgatggc gaccctggca aaaaatacga ggtgacttgg
 120

ctagatctcg ggcacettca ccttagtcgg ceggactcg tcaatcac cacaactgtc
 180
 gatgatgacg tcatcacctc tteccaggta aatgtcgcca acctccaccg cggggatgaa
 240
 aaacttttcg aagctcgca ttaccgcag attccgatgc ttgcatcacg tcatggctgg
 300
 acagctccat tcaattgtga gaccggcgca gcccatgcca tcgaggatgc gatgggcatt
 360
 accatcccaa ctgcgtggc atggatacga accctgctcg ctgagttcag cagaatcacc
 420
 tcacactca catttttctc atgggtaggc catcactgtg atgatgccg c
 471

<210> 268

<211> 157

<212> PRT

<213> Homo sapiens

<400> 268

Xaa	Pro	Gln	Arg	Val	Phe	Ser	Ser	Thr	Arg	Lys	Ile	Met	Phe	Val	Ile
1			5					10			15				
Gly	Ser	Met	Pro	Leu	Thr	His	Pro	Ser	Gln	Ser	Thr	Asp	Gly	Asp	Pro
		20					25					30			
Gly	Lys	Lys	Tyr	Glu	Val	Thr	Trp	Leu	Asp	Leu	Gly	His	Leu	His	Pro
	35					40					45				
Ser	Arg	Pro	Gly	Leu	Val	Thr	Ile	Thr	Thr	Thr	Val	Asp	Asp	Asp	Val
	50				55					60					
Ile	Thr	Ser	Ser	Gln	Val	Asn	Val	Gly	Asn	Leu	His	Arg	Gly	Asp	Glu
65			70					75						80	
Lys	Leu	Phe	Glu	Ala	Arg	Asp	Tyr	Arg	Gln	Ile	Pro	Met	Leu	Ala	Ser
		85						90				95			
Arg	His	Gly	Trp	Thr	Ala	Pro	Phe	Ile	Gly	Glu	Thr	Gly	Ala	Ala	His
	100					105						110			
Ala	Ile	Glu	Asp	Ala	Met	Gly	Ile	Thr	Ile	Pro	Thr	Arg	Val	Ala	Trp
	115					120						125			
Ile	Arg	Thr	Leu	Leu	Ala	Glu	Phe	Ser	Arg	Ile	Thr	Ser	His	Phe	Thr
	130				135						140				
Phe	Leu	Ser	Trp	Val	Gly	His	His	Cys	Asp	Asp	Ala	Gly			
145				150						155					

<210> 269

<211> 387

<212> DNA

<213> Homo sapiens

<400> 269

acgcgtgtcg tgtttccaga aaaaaccaat aaattagagt ttatggtaga agtgattgct
 60
 gatatgacgg taatcaatcc atttgatttc tttgtggaaa gtacgcaga agactaccga
 120
 ttgtcttatg acaaaagtct taaaaaagag ttagaacctt atttacaggt tctgaacct
 180
 tgttcgttac tcgacaaatg gctgtctggt gttgatcggt aaaaaacacc gatcaatgat
 240

tttctagtcg caataaacag tcgccttgcc ggtgatatg gctatggtat tcgcttagaa
 300
 ccggcgcttc agtcacctga agaaacgctc acattaatga aaggctcttg tcgcgatacc
 360
 tcgggggttat tggttcaaat actacgc
 387

<210> 270
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 270
 Thr Arg Val Val Phe Pro Glu Lys Thr Asn Lys Leu Glu Phe Met Val
 1 5 10 15
 Glu Val Ile Ala Asp Met Thr Val Ile Asn Pro Phe Asp Phe Val
 20 25 30
 Glu Ser Tyr Ala Glu Asp Tyr Pro Phe Ala Tyr Asp Lys Ala Leu Lys
 35 40 45
 Lys Glu Leu Glu Pro Tyr Leu Gln Val Ser Glu Pro Cys Ser Leu Leu
 50 55 60
 Asp Lys Trp Leu Ser Gly Val Asp Arg Glu Lys Thr Pro Ile Asn Asp
 65 70 75 80
 Phe Leu Val Ala Ile Asn Ser Arg Leu Ala Gly Asp Ile Gly Tyr Gly
 85 90 95
 Ile Arg Leu Glu Pro Gly Val Gln Ser Pro Glu Glu Thr Leu Thr Leu
 100 105 110
 Met Lys Gly Ser Cys Arg Asp Thr Ser Gly Leu Leu Val Gln Ile Leu
 115 120 125
 Arg

<210> 271
 <211> 443
 <212> DNA
 <213> Homo sapiens

<400> 271
 gccggcacca acggaaagtc ctctaccgag cgcattggctg attcgctttt gcgtgccttc
 60
 caccgccgag tgggttttgg aaaccagccca cacctgcagc gcgttactga gcgcattcggc
 120
 attgatggcc agccattca cccgcgcgat tatgtacgca tctggcagca gattaagcca
 180
 tttgtgaaaa tggtcgatgc cgaatcggac gtgcctatgt ctaagttcga ggtcttcgtg
 240
 gccctgtcct atgctcggtt tgccgacgcc cccggggagc tcgctgtcgt cgaagtcggc
 300
 cttggcggac gttgggacgc taccaatgtg gtcaacgcgg atgtctctgt cattaccgcc
 360
 gtgggcattg accacacgga ttacctgggg gagacgatca ctgaaatcgc aggcgagaaaa
 420
 gctggcatta ttaagccacg cgt
 443

<210> 272

<211> 147

<212> PRT

<213> Homo sapiens

<400> 272

```

Ala Gly Thr Asn Gly Lys Ser Ser Thr Ala Arg Met Val Asp Ser Leu
 1             5             10             15
Leu Arg Ala Phe His Arg Arg Val Gly Leu Val Thr Ser Pro His Leu
 20             25             30
Gln Arg Val Thr Glu Arg Ile Gly Ile Asp Gly Gln Pro Ile His Pro
 35             40             45
Arg Asp Tyr Val Arg Ile Trp His Glu Ile Lys Pro Phe Val Glu Met
 50             55             60
Val Asp Ala Glu Ser Asp Val Pro Met Ser Lys Phe Glu Val Phe Val
 65             70             75             80
Gly Leu Ser Tyr Ala Ala Phe Ala Asp Ala Pro Gly Asp Val Ala Val
 85             90             95
Val Glu Val Gly Leu Gly Gly Arg Trp Asp Ala Thr Asn Val Val Asn
100             105             110
Ala Asp Val Ser Val Ile Thr Pro Val Gly Met Asp His Thr Asp Tyr
115             120             125
Leu Gly Glu Thr Ile Thr Glu Ile Ala Gly Glu Lys Ala Gly Ile Ile
130             135             140
Lys Pro Arg
145

```

<210> 273

<211> 864

<212> DNA

<213> Homo sapiens

<400> 273

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caaaagtaaga ctgcttcaaa ttttgtgttc tgetctgcag ctgcctcccc cctgctgtcg
 60
aagagaagcc aaagccccc cccccaccc caaaggctcg gaagtctggc atccctactt
120
ccgagcctgg atcccagtaa ggcattctgc cccctcgcaa caccgagtgc cttagacagc
180
tgctgcctga gaactggcct ccagccgggt tcttcattcc atggggctcc cctgctgactg
240
catttcttga tctgggatga tgtttaccag cccaaaacca gtcatgttct tccaaaagct
300
tctctttgat agaattttga ggccatgcc cctcccttcc agtccacatg gaattccaga
360
atcagtcaca gcctctgatt ttttccaaga agagattgcc ttcaccattg ttaaatgtca
420
gcctgtacgg cagagacatg gtggtctgca caagcctgga caagtcttcc catattgatg
480
gtgggagcaa cccctgtaat ctactccttg gaaggatttt ttgctttgct tatgaaaagc
540
tgtgcttgag acttaggtac ttttctcagc tggacacact gatcccatcc catattgcac
600

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ctttgaagag atggatatca agtaccttt ggtagctgaa ataatcatat ctttctgatg
 660
 tctattgtat ctcctttgag gaaaagaaca cacattttta atggagattg gctgctttca
 720
 ggtagtgttg tctatcattg aaagagcatg gactcaaaca tcagccctga gttcttgagt
 780
 ccaccaact cccatcttct tgtggcacag gaaagctgcc ctctccctct cccaccacac
 840
 tcctgactaa tgccttcac gcgt
 864

<210> 274

<211> 116

<212> PRT

<213> Homo sapiens

<400> 274

Met Trp Thr Gly Arg Glu Val Ala Trp Pro Gln Asn Ser Ile Lys Glu
 1 5 10 15
 Lys Leu Leu Glu Glu His Asp Trp Phe Trp Ala Gly Lys His His Pro
 20 25 30
 Arg Ser Gly Asn Ala Val Ser Arg Glu Pro His Gly Met Arg Thr Pro
 35 40 45
 Ala Gly Gly Gln Phe Ser Gly Ser Ser Cys Leu Arg His Ser Val Leu
 50 55 60
 Gln Gly Gly Gln Asp Pro Tyr Trp Asp Pro Gly Ser Glu Val Gly Met
 65 70 75 80
 Pro Asp Phe Arg Ala Phe Glu Val Gly Gly Gly Phe Gly Phe Ser
 85 90 95
 Ser Thr Ala Gly Gly Ser Glu Leu Gln Ser Arg Thr Gln Asn Leu Lys
 100 105 110
 Gln Ser Tyr Phe
 115

<210> 275

<211> 911

<212> DNA

<213> Homo sapiens

<400> 275

naaatttaaa ggaacctccc ttctataacy gagagtattt attgcagctt tcctttctgt
 60
 ttattttcag gaatgaaagg aattaccagg ccttctgctt ttatacctac agctgaaagt
 120
 aattcctttc agctcagggt gaagactttg ccattctccaa ttgatgctaa acagcagttg
 180
 caacggaataa tccagaagaa gcagcaagaa cagaaactac aatccccctt gccaggagaa
 240
 tctgcagcaa aaaagtcaga aagtgtctaca agcaatggag tgactaatct tcctaattgga
 300
 aatccttcaa tcctttctcc tcaacctatt ggtatcggtg tggcagctgt ccctagtccc
 360
 attccggtcc agcggactag gcaattggta acttcaccca gtccaatgag ttcttctnga
 420

cggc aaagt cttcccc tca atgtac aggt ggtcactcag cacatgcagt ctgtgaaaca
 480
 ggcaccaaag actccccaga acgttcacgc agtctctggtg ggaatcggtt tgccccggcac
 540
 cgttaccctc agatcttacc caaaccagcg aacaccagtgc cactcaccat tcgctctcca
 600
 actactgtcc tctttactag tagtcccatc aaaactgctg ttgtaccgcg ttcacacatg
 660
 agttctctaa atgtgggtgaa aatgacaaca atatccctca caccagcaa cagtaaacacc
 720
 cctcttaaac attctgcctc agtcagcagt gctacaggaa caacagaaga atcaaggagt
 780
 gttccacaga tcaagaatgg ttctgtcgtg tcgcttcagt ctctctgggtc caggagcagc
 840
 agtgcggggg gaacatctgc tgtggaagtc aaagtggaac ccgaaacatc atcagatgag
 900
 catcctgtac a
 911

<210> 276

<211> 279

<212> PRT

<213> Homo sapiens

<400> 276

Met Lys Gly Ile Thr Gln Pro Ser Ala Phe Ile Pro Thr Ala Glu Ser
 1 5 10 15
 Asn Ser Phe Gln Pro Gln Val Lys Thr Leu Pro Ser Pro Ile Asp Ala
 20 25 30
 Lys Gln Gln Leu Gln Arg Lys Ile Gln Lys Lys Gln Gln Glu Gln Lys
 35 40 45
 Leu Gln Ser Pro Leu Pro Gly Glu Ser Ala Ala Lys Lys Ser Glu Ser
 50 55 60
 Ala Thr Ser Asn Gly Val Thr Asn Leu Pro Asn Gly Asn Pro Ser Ile
 65 70 75 80
 Leu Ser Pro Gln Pro Ile Gly Ile Val Val Ala Ala Val Pro Ser Pro
 85 90 95
 Ile Pro Val Gln Arg Thr Arg Gln Leu Val Thr Ser Pro Ser Pro Met
 100 105 110
 Ser Ser Ser Xaa Arg Gln Ser Ser Pro Gln Cys Thr Gly Gly His
 115 120 125
 Ser Ala His Ala Val Cys Glu Thr Gly Thr Lys Asp Ser Pro Glu Arg
 130 135 140
 Ser Ser Ser Pro Gly Gly Asn Arg Ser Ala Arg His Arg Tyr Pro Gln
 145 150 155 160
 Ile Leu Pro Lys Pro Ala Asn Thr Ser Ala Leu Thr Ile Arg Ser Pro
 165 170 175
 Thr Thr Val Leu Phe Thr Ser Ser Pro Ile Lys Thr Ala Val Val Pro
 180 185 190
 Ala Ser His Met Ser Ser Leu Asn Val Val Lys Met Thr Thr Ile Ser
 195 200 205
 Leu Thr Pro Ser Asn Ser Asn Thr Pro Leu Lys His Ser Ala Ser Val
 210 215 220
 Ser Ser Ala Thr Gly Thr Thr Glu Glu Ser Arg Ser Val Pro Gln Ile

```

225                230                235                240
Lys Asn Gly Ser Val Val Ser Leu Gln Ser Pro Gly Ser Arg Ser Ser
                245                250                255
Ser Ala Gly Gly Thr Ser Ala Val Glu Val Lys Val Glu Pro Glu Thr
                260                265                270
Ser Ser Asp Glu His Pro Val
                275

<210> 277
<211> 652
<212> DNA
<213> Homo sapiens

<400> 277
nnaccggtgg ggactctcgc tgaggctcctt aatggccctt ctctgtgtccc ggacggcacc
60
atgaaccttg ttggtgggct gcgtcaggca atggccacca ctggttactc ggagggtcaaa
120
gagttccagc gcactcgagct gacgattcgc taacctgttc accacgcaga atggtgttcc
180
ggtgagcggg tggatagcta gccttcggcc atgagtgaag tgcccgatga attggtcgtg
240
ttgcgtggcg cgattgacaa catggacgcc gccctcatcc atctgcttgc cgaaagggttc
300
cggattactc gcgaggtagg ccgcctcaag gcggagtgcg gttacctcc ggccgacccc
360
gcccgtagg ctgagcagat cgcgcggttg gcgcagttag cgttcgagtc gaacctcgac
420
cccgaattcg cgcagaaggt catcacgttc atcgtggccg aggtgggtcg tcaccacgaa
480
gctattgctg acgattctgg cgacgactct ggagtggcgg atacggggga ggcggatgtc
540
ctggggtcgg gcagctgagt tacagatcag gcgatgacgt cgccttggtg caccttcgac
600
gggattccga cgacgactgt gccggggggc acatccttga cgaccaacgc gt
652

<210> 278
<211> 115
<212> PRT
<213> Homo sapiens

<400> 278
Met Ser Glu Val Pro Asp Glu Leu Val Val Leu Arg Gly Ala Ile Asp
1          5          10          15
Asn Met Asp Ala Ala Leu Ile His Leu Leu Ala Glu Arg Phe Arg Ile
20          25          30
Thr Arg Glu Val Gly Arg Leu Lys Ala Glu Cys Gly Leu Pro Pro Ala
35          40          45
Asp Pro Ala Arg Glu Ala Glu Gln Ile Ala Arg Leu Arg Gln Leu Ala
50          55          60
Val Glu Ser Asn Leu Asp Pro Glu Phe Ala Gln Lys Val Ile Thr Phe
65          70          75          80
Ile Val Ala Glu Val Val Arg His His Glu Ala Ile Ala Asp Asp Ser

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      85              90              95
Gly Asp Asp Ser Gly Val Ala Asp Thr Gly Glu Ala Asp Val Pro Gly
      100              105              110
Ser Gly Ser
      115

<210> 279
<211> 348
<212> DNA
<213> Homo sapiens

<400> 279
cgggagggtca cacaagcatt caaacatag cagatggtaa atgttatgtt atgtgtattt
60
taccacaatc cttaaaaaga aaagaaagaa aggcataatgg aacctctagt tacctctcat
120
ccagcttcaa aattgtcagt gcattggtaa tcttgtctta tctgcccctc acccaccctt
180
ttccagaaag aagaccaga ggattccaca tctgcttgga aaccacgacc agtctogact
240
ggaagtgtgt gttaatgttg catgtattca taaaacctct aggcatttct agtgtccctc
300
agaatttttc caaattcagg caaacacaga aattacttcc aaaaattt
348

<210> 280
<211> 99
<212> PRT
<213> Homo sapiens

<400> 280
Met Cys Ile Leu Pro Gln Ser Leu Lys Arg Lys Glu Arg Lys Ala Tyr
1              5              10              15
Gly Thr Pro Ser Tyr Leu Ser Ser Ser Phe Lys Ile Val Ser Ala Trp
      20              25              30
Ser Ile Leu Ser Tyr Leu Pro Leu Thr His Pro Phe Pro Glu Arg Arg
      35              40              45
Pro Arg Gly Phe His Ile Cys Leu Glu Thr Thr Thr Ser Leu Asp Trp
      50              55              60
Lys Leu Leu Leu Met Leu His Val Phe Ile Lys Pro Leu Gly Ile Ser
65              70              75              80
Ser Val Pro Gln Asn Phe Ser Lys Phe Arg Gln Thr Gln Lys Leu Leu
      85              90              95
Pro Lys Ile

<210> 281
<211> 384
<212> DNA
<213> Homo sapiens

<400> 281
agatctgcgc agatcgataa tggattaaag actcttgaag ctggagtcaac cgagatgaac
60

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aacaagggtg tgggggcaac gaaggctgtc ggtgattcca ccactaccgt caaccagggtg
 120
 aattctgcgt taggaantgc cgactcagcg gcagagaaga cgtcagagcg cgttactcag
 180
 acgcgcgtgg gtgcccagcg gattaccggc gctgctcaaa atgtcatggc tgattcccaa
 240
 gctgtcaact cagccatggt tccgcttatt aataacgtga caaagaatct tcctaccttg
 300
 caaaaacagg ccaggaatct cgtgtcagtg aacggtaccg tgcagaaccc caacgggtgat
 360
 tctgtcatta agattcaaca gacc
 384

<210> 282

<211> 110

<212> PRT

<213> Homo sapiens

<400> 282

Met	Asn	Asn	Lys	Val	Leu	Gly	Ala	Thr	Lys	Ala	Val	Gly	Asp	Ser	Thr
1				5					10					15	
Thr	Thr	Val	Asn	Gln	Val	Asn	Ser	Ala	Leu	Gly	Xaa	Ala	Asp	Ser	Ala
		20					25					30			
Ala	Glu	Lys	Thr	Ser	Ser	Ala	Val	Thr	Gln	Thr	Arg	Val	Gly	Ala	Gln
		35					40					45			
Ala	Ile	Thr	Gly	Ala	Ala	Gln	Asn	Val	Met	Ala	Asp	Ser	Gln	Ala	Val
	50					55				60					
Asn	Ser	Ala	Met	Val	Pro	Leu	Ile	Asn	Asn	Val	Thr	Lys	Asn	Leu	Pro
65				70					75					80	
Thr	Leu	Gln	Lys	Gln	Ala	Arg	Asn	Leu	Val	Ser	Val	Asn	Gly	Thr	Leu
			85						90					95	
Gln	Asn	Pro	Asn	Gly	Asp	Ser	Val	Ile	Lys	Ile	Gln	Gln	Thr		
			100					105					110		

<210> 283

<211> 426

<212> DNA

<213> Homo sapiens

<400> 283

cgcgtagacc aatgtgagac ggccgtcacc aagggcatgc gcgacaagtc ggttggttagc
 60
 ggaccggata ttgtgcgtcg cgagctgcgc catgtcgtga cgagcggcac gattgtcgat
 120
 ggaagcgtac tggctgacga attgagcagc tactgcatga gtatcaagga gcaogtcgcg
 180
 tctgtaggcc tatccgagtt tggcatctgc accctcgacg ccgccaccgc cgagttccga
 240
 tacatgacat tcgtcgacga tgccgtgctg tcacaactcg agacattgct gcggtctcta
 300
 cgcatacaagg aagtcttgca tgaaaaaggg gtcattgttc ctccacgct gcgcttgatc
 360
 cgcaacgcgg tgcccaccac ctgccaaatt accatgctca agcctgatac cgaattgtcg
 420

gagaga
426

<210> 284
<211> 142
<212> PRT
<213> Homo sapiens

<400> 284
Arg Val Asp Gln Cys Glu Thr Ala Val Thr Lys Gly Met Arg Asp Lys
1 5 10 15
Ser Val Gly Ser Gly Pro Asp Ile Val Arg Arg Glu Leu Arg His Val
20 25 30
Val Thr Ser Gly Thr Ile Val Asp Gly Ser Val Leu Ala Asp Glu Leu
35 40 45
Ser Ser Tyr Cys Met Ser Ile Lys Glu His Val Arg Ser Asp Gly Leu
50 55 60
Ser Glu Phe Gly Ile Cys Thr Leu Asp Ala Ala Thr Ala Glu Phe Arg
65 70 75 80
Tyr Met Thr Phe Val Asp Asp Ala Val Leu Ser Gln Leu Glu Thr Leu
85 90 95
Leu Arg Ser Leu Arg Ile Lys Glu Val Leu His Glu Lys Gly Val Met
100 105 110
Leu Pro Ser Thr Leu Arg Leu Ile Arg Asn Ala Val Pro Thr Thr Cys
115 120 125
Gln Ile Thr Met Leu Lys Pro Asp Thr Glu Leu Ser Glu Arg
130 135 140

<210> 285
<211> 345
<212> DNA
<213> Homo sapiens

<400> 285
acgcgtgcag tcccttaccg acatgctggc agatgagctc gacggcagcc gcttcaccgg
60
cgattttcca gaaatctaca aacgtcagaa ctgcgatcttc ggcgatgtaa ggaataactt
120
ttacaaaaaa ggataccgca tcatcaacgt agcgaatggt gtattgcgca agatttcact
180
ggtaagcgca ggcaatgcag acaatgtgaa aggtcaggcc ctgttcttcc gcggtgtggc
240
gcatttcgaa ctctgctggt tgtttgcaca accctggggg tatacttcgg acaattcaca
300
ctacggcatc ccgctccgca atgaaatcgt aattggttct attcn
345

<210> 286
<211> 107
<212> PRT
<213> Homo sapiens

<400> 286
Met Leu Ala Asp Glu Leu Asp Gly Ser Arg Phe Thr Gly Asp Phe Ser

```

      1           5           10           15
Glu Ile Tyr Lys Arg Gln Asn Ser Ile Phe Gly Asp Val Arg Asn Asn
      20           25           30
Phe Tyr Lys Lys Gly Tyr Arg Ile Ile Asn Val Ala Asn Gly Val Leu
      35           40           45
Arg Lys Ile Ser Leu Val Ser Ala Gly Asn Ala Asp Asn Val Lys Gly
      50           55           60
Gln Ala Leu Phe Phe Arg Gly Val Ala His Phe Glu Leu Val Arg Leu
      65           70           75           80
Phe Ala Gln Pro Trp Gly Tyr Thr Ser Asp Asn Ser His Tyr Gly Ile
      85           90           95
Pro Leu Arg Asn Glu Ile Val Ile Gly Ser Ile
      100          105

<210> 287
<211> 1379
<212> DNA
<213> Homo sapiens

<400> 287
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tcagttgagg gattcgggac aatagcagtg ctgatggtaa tgttgccgat ttccctgttt
120
gttttgcagg tcacggccag gggccttggg ccgctgttac agtttgccta cactgccaa
180
ctgttactca gcagagaaaa catccgcgag gtcattccgt gtgctgagtt cctgcgatg
240
cacaacctgg aggactcctg cttcagcttc ctgcagaccc agctcctgaa cagtggaggat
300
ggcctgtttg tgtgccggaa ggatgctgcy tgccagcgcc cacacgagga ctgcgagaac
360
tgtgcaggag aggaggagga tgaaggaggag gagacgatgg attcagagac ggccaagatg
420
gcttgcccca gggaccagat gcttcagag cccatcagct ttgaggccgc cgccatcccc
480
gtagcagaga aggaagaagc cctgctgccc gagcctgacg tgcccacaga caccaaggag
540
agctcagaaa aggacgcgtt aacgcagtac ccagatata agaaatacca gcttgcatgt
600
accaagaatg tctataatgc atcatcacac agtacctcag gttttgcaag cacattccgg
660
gaagataact ctagcaacag cctcaagccg gggcctgcca gggggcagat taaaagttag
720
cgcgccagtg aagagaatga ggaagagagc atcacgctct gcctgtctgg agatgagcct
780
gacgccaagg acagagcggg ggaatgctgag atggaccgga aacagcccg cctgtccctt
840
accgccacgg ccccgctgg ggcgcctgc ctggagagat ccaggagcgt ggctctgccc
900
tcctgcttaa ggtctctgtt cagcataacg aaaagtgtgg agctgtctgg cctgcccagt
960
acatctcagc agcactttgc caggagtcca gcctgccctt ttgacaaggg gatcactcag
1020

```

ggtgacctta aaactgacta cacccttttc acaggggaatt atggacagcc ccacgtgggc
 1080
 cagaaggagg tgtccaactt caccatgggg tcgcccctca gggggcctgg gttggaggct
 1140
 ctctgtaaac aggagggaga gctggaccgg aggagcgtga tcttctctc cagcgtttgt
 1200
 gaccaagtga gcacctcggt gcattcttat tctgggggtga gcagtttgga caaagacctc
 1260
 tctgagccgg tgccaaaggg tctgtgggtg ggagccggcc agtccctccc cagctcgcag
 1320
 gcctactccc acggtgggct gatggccgac cacttgccac gaaggatgcg gcccaacac
 1379

<210> 288

<211> 428

<212> PRT

<213> Homo sapiens

<400> 288

Met	Val	Met	Leu	Ala	Ile	Ser	Leu	Phe	Val	Leu	Gln	Val	Thr	Ala	Arg
1			5					10					15		
Gly	Phe	Gly	Pro	Leu	Leu	Gln	Phe	Ala	Tyr	Thr	Ala	Lys	Leu	Leu	Leu
		20					25					30			
Ser	Arg	Glu	Asn	Ile	Arg	Glu	Val	Ile	Arg	Cys	Ala	Glu	Phe	Leu	Arg
		35				40					45				
Met	His	Asn	Leu	Glu	Asp	Ser	Cys	Phe	Ser	Phe	Leu	Gln	Thr	Gln	Leu
	50					55				60					
Leu	Asn	Ser	Glu	Asp	Gly	Leu	Phe	Val	Cys	Arg	Lys	Asp	Ala	Ala	Cys
65				70					75					80	
Gln	Arg	Pro	His	Glu	Asp	Cys	Glu	Asn	Ser	Ala	Gly	Glu	Glu	Glu	Asp
			85					90					95		
Glu	Glu	Glu	Glu	Thr	Met	Asp	Ser	Glu	Thr	Ala	Lys	Met	Ala	Cys	Pro
			100					105					110		
Arg	Asp	Gln	Met	Leu	Pro	Glu	Pro	Ile	Ser	Phe	Glu	Ala	Ala	Ala	Ile
			115				120					125			
Pro	Val	Ala	Glu	Lys	Glu	Glu	Ala	Leu	Leu	Pro	Glu	Pro	Asp	Val	Pro
		130				135					140				
Thr	Asp	Thr	Lys	Glu	Ser	Glu	Lys	Asp	Ala	Leu	Thr	Gln	Tyr	Pro	
145				150					155					160	
Arg	Tyr	Lys	Lys	Tyr	Gln	Leu	Ala	Cys	Thr	Lys	Asn	Val	Tyr	Asn	Ala
			165						170					175	
Ser	Ser	His	Ser	Thr	Ser	Gly	Phe	Ala	Ser	Thr	Phe	Arg	Glu	Asp	Asn
		180					185					190			
Ser	Ser	Asn	Ser	Leu	Lys	Pro	Gly	Leu	Ala	Arg	Gly	Gln	Ile	Lys	Ser
		195					200					205			
Glu	Pro	Pro	Ser	Glu	Glu	Asn	Glu	Glu	Glu	Ser	Ile	Thr	Leu	Cys	Leu
		210				215					220				
Ser	Gly	Asp	Glu	Pro	Asp	Ala	Lys	Asp	Arg	Ala	Gly	Asp	Val	Glu	Met
225					230				235					240	
Asp	Arg	Lys	Gln	Pro	Ser	Pro	Ala	Pro	Thr	Pro	Thr	Ala	Pro	Ala	Gly
			245						250					255	
Ala	Ala	Cys	Leu	Glu	Arg	Ser	Arg	Ser	Val	Ala	Ser	Pro	Ser	Cys	Leu
		260					265						270		
Arg	Ser	Leu	Phe	Ser	Ile	Thr	Lys	Ser	Val	Glu	Leu	Ser	Gly	Leu	Pro

```

      275              280              285
Ser Thr Ser Gln Gln His Phe Ala Arg Ser Pro Ala Cys Pro Phe Asp
  290              295              300
Lys Gly Ile Thr Gln Gly Asp Leu Lys Thr Asp Tyr Thr Pro Phe Thr
  305              310              315              320
Gly Asn Tyr Gly Gln Pro His Val Gly Gln Lys Glu Val Ser Asn Phe
      325              330              335
Thr Met Gly Ser Pro Leu Arg Gly Pro Gly Leu Glu Ala Leu Cys Lys
      340              345              350
Gln Glu Gly Glu Leu Asp Arg Arg Ser Val Ile Phe Ser Ser Ser Ala
      355              360              365
Cys Asp Gln Val Ser Thr Ser Val His Ser Tyr Ser Gly Val Ser Ser
      370              375              380
Leu Asp Lys Asp Leu Ser Glu Pro Val Pro Lys Gly Leu Trp Val Gly
      385              390              395              400
Ala Gly Gln Ser Leu Pro Ser Ser Gln Ala Tyr Ser His Gly Gly Leu
      405              410              415
Met Ala Asp His Leu Pro Gly Arg Met Arg Pro Asn
      420              425

```

<210> 289

<211> 822

<212> DNA

<213> Homo sapiens

<400> 289

```

ngcattaccg ggctgaagac ggggtgctcat gacctcaacg atataggcta ttgctagaac
60
cacgccggcc caccgccgcg aaagcgagc caccggcacca ggagggtgca catggctgat
120
agcagtcga agcggaagga cgagcgcaact gccgatgaga tcaggcggga tattgcagcg
180
accctgctt gcctggcagc cggggtggag aacctctgtg aggaggtgca tccggcaacc
240
ctcaagcgtg aagcatctga tcgtgcccgt gatattgtgc aggtgagtt tgatcaggtc
300
aagagccagg tcaaagatga gaaatggtg cgcgtagcgc ggatcgcatg ggccgcagga
360
gtgctcgctg ccggcgctcg cagcattatt gtgctgcgcg cgatagtcgg tcgcgcgaacg
420
ggcgctaccg ctctgcgcaa gcttgagaag ctgcagcttt ctcaggcgaa gcggggttcga
480
aaagatgcca agcagcgtag taagggaagat gaaaaggcag ccaagaaaaa tgccaagctc
540
ggcaagaaga acgctaagaa gtacggcaag ctcgataccg atgactcgtc ggtaagcaac
600
cttgccgaga aaatgctcaa acaggccgcc gtgctgcgtg cacaggcgcg tgcggggcg
660
tgagaacagt gccgcctagc aaacagcggg cacagcgcaa aacaggtttg gctccgaccc
720
atggttgacc ggagccaaac tgtgttaccg catcatttga taccgccagc agccaggcct
780
gcgacaatgc gacgctgtaa taccagcacc atgatgacta gt
822

```

<210> 290

<211> 183

<212> PRT

<213> Homo sapiens

<400> 290

```

Met Ala Asp Ser Lys Ser Lys Ala Lys Asp Glu Arg Thr Ala Asp Glu
 1             5             10             15
Ile Arg Arg Asp Ile Ala Ala Thr Arg Ala Cys Leu Ala Ala Gly Val
 20             25             30
Glu Asn Leu Val Glu Glu Val His Pro Ala Thr Leu Lys Arg Glu Ala
 35             40             45
Ser Asp Arg Ala Arg Asp Phe Val Gln Gly Glu Phe Asp Gln Val Lys
 50             55             60
Ser Gln Val Lys Asp Glu Lys Trp Trp Arg Val Gln Arg Ile Ala Met
 65             70             75             80
Ala Ala Gly Val Leu Ala Ala Gly Val Val Ser Ile Ile Val Leu Arg
 85             90             95
Ala Ile Val Gly Arg Ala Thr Gly Ala Thr Ala Arg Arg Lys Leu Glu
100             105             110
Lys Leu Gln Leu Ser Gln Ala Lys Arg Val Arg Lys Asp Ala Lys Gln
115             120             125
Arg Ser Lys Glu Asp Glu Lys Ala Ala Lys Lys Asn Ala Lys Leu Gly
130             135             140
Lys Lys Asn Ala Lys Lys Tyr Gly Lys Leu Asp Thr Asp Asp Ser Ser
145             150             155             160
Val Ser Asn Leu Ala Glu Lys Met Leu Lys Gln Ala Ala Val Leu Arg
165             170             175
Ala Gln Ala Ala Ala Gly Ala
180

```

<210> 291

<211> 351

<212> DNA

<213> Homo sapiens

<400> 291

```

ctccacgcgc acaagactta cgacggggcgt cgctgcccgg ctgagtgcgc ggcccgcctcc
 60
atcacccccc gcatcgctcg ccgcggcgctg gagaccacgc agcgcttggg ccggtatgcg
120
tgggtcgtcg agcgacactt cgcctggctc aaccgcttcc ggcgcttcgc catccgctac
180
gagcggcgctg ctgacatcca cgaagccttc gtgatacctcg gctgcgcctc catctgcctc
240
aaccagatga gacggttttg ttaggtgctg taaagggaga atggctgcag ctgggcttatc
300
tgctccctcg tcaaccagaa acaggctgct catcctcact caacaacgcg t
351

```

<210> 292

<211> 87

<212> PRT

<213> Homo sapiens

<400> 292

```

Leu His Ala Asp Lys Thr Tyr Asp Gly Arg Arg Cys Arg Ala Glu Cys
 1           5           10           15
Arg Ala Arg Ser Ile Thr Pro Arg Ile Ala Arg Arg Gly Val Glu Thr
          20           25           30
Ser Glu Arg Leu Gly Arg Tyr Arg Trp Val Val Glu Arg Thr Phe Ala
          35           40           45
Trp Leu Asn Arg Phe Arg Arg Leu Ala Ile Arg Tyr Glu Arg Arg Ala
          50           55           60
Asp Ile His Glu Ala Phe Val Ile Leu Gly Cys Ala Leu Ile Cys Leu
          65           70           75           80
Asn Gln Ile Arg Arg Phe Cys
                        85

```

<210> 293

<211> 716

<212> DNA

<213> Homo sapiens

<400> 293

```

nncttcacca caccggccat caacgcacct cctcgtgata acctgacctt ctgccgaacc
60
ggttaatcag tttagtggcg aggcattgaca cgttgacgag tcagctgtgg tacatgtgcg
120
gaacactcac aatgccacgg cggcatgttg ctgtcggta cgaaccttat ggtgatcgct
180
gtgagaaccc gaacggcaga tgcgattctg cgggcactgg atctgaacag gtttaagggt
240
gcgaagactt tcgatgttcc agtgtgcgtc atagctgggt cggggacagg taaaactcgt
300
gctgtcactc atcgcattgc ctacgggtgca ggcacaggca agcttgatcc gcgtcgatcc
360
ctcgcggtca cttttacgac taaggcagct ggcacgatga gaggtcgact cgccgatctg
420
gggggtgttg gtgtgcaggc tcgcactatt cattctgcgg cgttcgggca gatcaagttt
480
ttctggcctc gtgcataata ctgtgagttg ccaccgggtga gtgattctcg tttctcgatg
540
gtggcggaga cgacctatcg cattggtctg ggcaatgaca aggcgctgct gcgcgacttg
600
tcgcgcgaga tctcgtgggc gaaggtctca aatgtgccga ctgatcaata cgcatccctg
660
gctaggcgcg aaggtcgggt ggtggcggga gtttcggcaa ctgacgtagg acgcgt
716

```

<210> 294

<211> 190

<212> PRT

<213> Homo sapiens

<400> 294

```

Met Leu Leu Ser Val Thr Thr Leu Met Val Ile Ala Val Arg Thr Arg

```

```

      1           5           10           15
Thr Ala Asp Ala Ile Leu Ala Ala Leu Asp Leu Asn Arg Phe Lys Val
      20           25           30
Ala Lys Thr Phe Asp Val Pro Val Cys Val Ile Ala Gly Ala Gly Thr
      35           40           45
Gly Lys Thr Arg Ala Val Thr His Arg Ile Ala Tyr Gly Ala Ala Thr
      50           55           60
Gly Lys Leu Asp Pro Arg Arg Thr Leu Ala Val Thr Phe Thr Thr Lys
      65           70           75           80
Ala Ala Gly Thr Met Arg Gly Arg Leu Ala Asp Leu Gly Val Val Gly
      85           90           95
Val Gln Ala Arg Thr Ile His Ser Ala Ala Leu Arg Gln Ile Lys Phe
      100          105          110
Phe Trp Pro Arg Ala Tyr Asn Cys Glu Leu Pro Pro Val Ser Asp Ser
      115          120          125
Arg Phe Ser Met Val Ala Glu Thr Thr His Arg Ile Gly Leu Gly Asn
      130          135          140
Asp Lys Ala Leu Leu Arg Asp Leu Ser Ala Glu Ile Ser Trp Ala Lys
      145          150          155          160
Val Ser Asn Val Pro Thr Asp Gln Tyr Ala Ser Leu Ala Arg Ala Glu
      165          170          175
Gly Arg Val Val Ala Gly Val Ser Ala Thr Asp Val Gly Arg
      180          185          190

```

<210> 295

<211> 417

<212> DNA

<213> Homo sapiens

<400> 295

```

ttcatatcagc gcagtagccg agtccatgcy atcaacaacg tcagcgtatc ttccaccatc
60
tctggagtgc acctttctcat gggagaaagc ggatcaggaa aaagcaccct catcaatctc
120
ctagctggtc tggatacccc agattcgggg tccgtctacg cagaaggcgt caccgtatct
180
gatcagagcg aggcgagcag agcccaattt cgattacgcc acatcgccgt catcttccag
240
gacgacaacc tcactcgtga gttgaccaat accgagaata ttgcgctacc cctgtgggcy
300
cagggcacat cgaagtccga tgccactgaa atcgcccacg aagccatgcy aaaactaggaa
360
atcagagtcac tgggcagacg ctaccccgcg gaggtctcgg gtggccaacg gcaacgc
417

```

<210> 296

<211> 139

<212> FRT

<213> Homo sapiens

<400> 296

```

Phe Ile Ser Gly Ser Thr Arg Val His Ala Ile Asn Asn Val Ser Val
1           5           10           15
Ser Phe Thr His Ser Gly Val His Leu Leu Met Gly Glu Ser Gly Ser

```

```

                20                25                30
Gly Lys Ser Thr Leu Ile Asn Leu Leu Ala Gly Leu Asp Thr Pro Asp
      35      40      45
Ser Gly Ser Val Tyr Ala Glu Gly Val Thr Val Ser Asp Gln Ser Glu
      50      55      60
Ala Ser Arg Ala Gln Phe Arg Leu Arg His Ile Ala Val Ile Phe Gln
      65      70      75      80
Asp Asp Asn Leu Ile Ala Glu Leu Thr Asn Thr Glu Asn Ile Ala Leu
      85      90      95
Pro Leu Trp Ala Gln Gly Thr Ser Lys Ser Asp Ala Thr Glu Ile Ala
      100      105      110
His Glu Ala Met Arg Lys Leu Gly Ile Glu Ser Leu Gly Arg Arg Tyr
      115      120      125
Pro Gly Glu Val Ser Gly Gly Gln Arg Gln Arg
      130      135

```

<210> 297

<211> 378

<212> DNA

<213> Homo sapiens

<400> 297

```

tacaccatcg gtgaccagat tgtcgaagct ctgcaggtgc actcgaagat gtccgacaag
60
gacgcttgagg cgcgtgccat cgagctgtctc gacttggtgg ggattccgaa tcccagagtg
120
cgtgccaaag cttttccgca cgagttttcc ggtggcatga ggcaacgagt cgtcatcgcc
180
atggccatcg cgaacgaccc tgacctcatc atcgccgacg agccgacgac ggccctcgac
240
gtgaccatcc aggccagat tctcgatttg ctgcgcgtag cccagcgtga aacccatcgc
300
ggcgtcgtta tgatcaccca cgacctcggt gtggtagctg gtctggctga cagggttgcc
360
gtgatgtatg ccggacgc
378

```

<210> 298

<211> 126

<212> PRT

<213> Homo sapiens

<400> 298

```

Tyr Thr Ile Gly Asp Gln Ile Val Glu Ala Leu Gln Val His Ser Lys
1      5      10      15
Met Ser Asp Lys Asp Ala Trp Ala Arg Ala Ile Glu Leu Leu Asp Leu
20      25      30
Val Gly Ile Pro Asn Pro Glu Val Arg Ala Lys Ala Phe Pro His Glu
35      40      45
Phe Ser Gly Gly Met Arg Gln Arg Val Val Ile Ala Met Ala Ile Ala
50      55      60
Asn Asp Pro Asp Leu Ile Ile Ala Asp Glu Pro Thr Thr Ala Leu Asp
65      70      75      80
Val Thr Ile Gln Ala Gln Ile Leu Asp Leu Leu Arg Val Ala Gln Arg

```

```

      85              90              95
Glu Thr His Ala Gly Val Val Met Ile Thr His Asp Leu Gly Val Val
      100              105              110
Ala Gly Leu Ala Asp Arg Val Ala Val Met Tyr Ala Gly Arg
      115              120              125

```

<210> 299

<211> 368

<212> DNA

<213> Homo sapiens

<400> 299

```

gtgcacgggt tcgttggcat gcgcaatgac cgggagaact tcggttttga tccgagactt
60
ccagcccaat ggacgtcgat caaacaccac atgctcattg gcgactctca catgctcggt
120
ttcttggaac gtgacgcat tacgttcag attctgtcgg gccatgaccg cgacgtgaca
180
gtgcgcgggt agctctacca cattgggggt gagccggta gggcgccgtt gtccgatcag
240
gggcccgtgc gtcttagcct gcgcgttacc catccgatct cggggttgcg tcgagctgac
300
ggttctctta tcactgcaga agttcccgcc agcattgctg agacgattgg gtcttctccg
360
atctcgac
368

```

<210> 300

<211> 122

<212> PRT

<213> Homo sapiens

<400> 300

```

Val His Gly Phe Val Gly Met Arg Asn Asp Arg Glu Asn Leu Arg Phe
  1              5              10              15
Asp Pro Arg Leu Pro Ala Gln Trp Thr Ser Ile Lys His His Met Leu
  20              25              30
Ile Gly Asp Ser His Met Leu Val Phe Leu Glu Arg Asp Ala Ile Thr
  35              40              45
Phe Gln Ile Leu Ser Gly His Asp Arg Asp Val Thr Val Arg Gly Glu
  50              55              60
Leu Tyr His Ile Gly Val Glu Pro Val Arg Val Pro Leu Ser Asp Gln
  65              70              75              80
Gly Pro Leu Arg Pro Ser Leu Arg Val Thr His Pro Ile Ser Gly Leu
  85              90              95
Arg Arg Ala Asp Gly Ser Leu Ile Thr Ala Glu Val Pro Gly Ser Ile
  100             105             110
Ala Glu Thr Ile Gly Ser Ser Pro Ile Ser
  115             120

```

<210> 301

<211> 456

<212> DNA

<213> Homo sapiens

<400> 301
 ggccggggtta ttgccgccc gtttgtcggg gaaacccggc agaccttcga gcgcacggc
 60
 aaccgggcgc actattccgt accgccgccc gaaccgacct tgcctgcacag gcttacggac
 120
 gcggggccgga cgggtgatcgc aatcggaag attggtgata tctacgcga caaaggcgtg
 180
 tctcagggtgc gtaaggcaat ggcaatattg gccttgttcg atgaaacact cattgccatg
 240
 gacgacgcgc aggacggcga tctggtcttc accaacttcg tggatttcga catgctctac
 300
 gggcatcgca gggatgtgcc cggctatgcc gccgcgctcg aggccttcga ccggaggcgtg
 360
 ccggaagcca tggcgaaatt gcggacgggc gatcttctga tcctgacagc cgatcatggc
 420
 tgcgaccga cccctcaaggg aaccgaccac acgcgt
 456

<210> 302
 <211> 152
 <212> PRT
 <213> Homo sapiens

<400> 302
 Gly Arg Val Ile Ala Arg Pro Phe Val Gly Glu Thr Arg Gln Thr Phe
 1 5 10 15
 Glu Arg Thr Gly Asn Arg Arg Asp Tyr Ser Val Pro Pro Glu Pro
 20 25 30
 Thr Leu Leu Asp Arg Leu Thr Asp Ala Gly Arg Thr Val Ile Ala Ile
 35 40 45
 Gly Lys Ile Gly Asp Ile Tyr Ala His Lys Gly Val Ser Gln Val Arg
 50 55 60
 Lys Ala Met Ala Ile Leu Ala Leu Phe Asp Glu Thr Leu Ile Ala Met
 65 70 75 80
 Asp Asp Ala Gln Asp Gly Asp Leu Val Phe Thr Asn Phe Val Asp Phe
 85 90 95
 Asp Met Leu Tyr Gly His Arg Arg Asp Val Pro Gly Tyr Ala Ala Ala
 100 105 110
 Leu Glu Ala Phe Asp Arg Arg Leu Pro Glu Ala Met Ala Lys Leu Arg
 115 120 125
 Thr Gly Asp Leu Leu Ile Leu Thr Ala Asp His Gly Cys Asp Pro Thr
 130 135 140
 Leu Lys Gly Thr Asp His Thr Arg
 145 150

<210> 303
 <211> 402
 <212> DNA
 <213> Homo sapiens

<400> 303
 nncgtgggca tcgaggagtt cctcgacatg aagtatcacg cgacgccgat tcatcgctgc
 60

tgacagcggg tttccggaac acatcagcgt tcagacagga gcgaggagac catgtacctg
 120
 ggtgctcagc tggtcagtga cagcgagtag gagcagcgcc tgagacgtgt ccgtgagctc
 180
 atggaccgtc agggctctgtc ggcgatcacc gtcaccgacc cggccaacat cttctatctg
 240
 atcgggttaca acgcctgggtc gttctacacc ccgcagatgc tgttcgtgccc gatcgacgga
 300
 gagatggtcc tctacgctcg cgagatggat cgcattggcg acatcngcac gacgtcgttg
 360
 cccgccgacc agatcgtcgg ttaccgccgag agttatgtgc ac
 402

<210> 304

<211> 97

<212> FRT

<213> Homo sapiens

<400> 304

Met	Tyr	Leu	Gly	Ala	Gln	Leu	Phe	Ser	Asp	Ser	Glu	Tyr	Glu	Gln	Arg
1				5					10				15		
Leu	Arg	Arg	Val	Arg	Glu	Leu	Met	Asp	Arg	Gln	Gly	Leu	Ser	Ala	Ile
			20					25				30			
Ile	Val	Thr	Asp	Pro	Ala	Asn	Ile	Phe	Tyr	Leu	Ile	Gly	Tyr	Asn	Ala
		35				40					45				
Trp	Ser	Phe	Tyr	Thr	Pro	Gln	Met	Leu	Phe	Val	Pro	Ile	Asp	Gly	Glu
	50				55					60					
Met	Val	Leu	Tyr	Ala	Arg	Glu	Met	Asp	Arg	Met	Ala	His	Ile	Xaa	Thr
65				70			75				80				
Thr	Ser	Leu	Pro	Ala	Asp	Gln	Ile	Val	Gly	Tyr	Pro	Glu	Ser	Tyr	Val
			85					90				95			

His

<210> 305

<211> 375

<212> DNA

<213> Homo sapiens

<400> 305

nnacgcgtcg gttccgacc gagcgaccgg atcgcatcga cgagcacgct gcaccagtgc
 60
 gtgtcgtctc ggccaatatg ggcgatcagc cggtacagtt cgggatcgtc gtcacacctg
 120
 gccgccattt cggatgcgac acgcgcgcct gcgcgctcgg cctccagcaa ctcctcgagc
 180
 gtcgccacca gcgcggcgcg atcttcatgc ggagtcagat cggcgcgggc gtcaggcccc
 240
 tcgccatcgc tcggaatcga catgcagcac cctcctgccca ggatcgatgg cgtaatacgt
 300
 gcgacggtag acggcgcggtg ttgcacgaac gtgcaaatca gcgcgtgcct cgtgccatat
 360
 acgtcacatc atatg
 375

```

<210> 306
<211> 125
<212> PRT
<213> Homo sapiens

<400> 306
Xaa Arg Val Gly Ser Ala Ser Ser Asp Arg Ile Ala Ser Thr Ser Thr
 1             5             10             15
Leu His Gln Cys Val Ser Ser Trp Arg Ile Trp Ala Ile Ser Arg Tyr
      20             25             30
Ser Ser Gly Ser Ser Leu Thr Ser Ala Ala Ile Ser Asp Ala Thr Arg
      35             40             45
Ala Pro Ala Arg Ser Ala Ser Ser Asn Ser Ser Val Ala Thr Ser
      50             55             60
Ala Ala Arg Ser Ser Cys Gly Val Arg Ser Ala Arg Ala Ser Gly Pro
      65             70             75             80
Ser Pro Cys Val Gly Ile Asp Met Gln His Pro Pro Ala Arg Ile Asp
      85             90             95
Gly Val Ile Arg Ala Thr Val His Gly Ala Cys Cys Thr Asn Val Gln
      100            105            110
Ile Ser Ala Cys Leu Val Pro Tyr Thr Ser His His Met
      115            120            125

<210> 307
<211> 685
<212> DNA
<213> Homo sapiens

<400> 307
actagttctg gccgctcccc tggggctttg ggtaacaatt gtcagcccca cccatcctag
 60
ggtttaggaag gctattctct ttggccactc tcatectaag acctatttgg agaaccctctg
120
gggtttgagtc ctttttttca gcagaatgag gcttgatccg gcattatagc acctgcgaca
180
tttgatgtct ctttcttcca cccactcacc ccacctgggg gggtgggggc aaaaagtggc
240
tcaaaagtgc gggttcagagt tctctgtaaa caaggctcct cctcactgt cctcaccctg
300
ctccagcaga gggagcagcg gaaggaccac tctgctgcag ccatgcttgt ttctaaccga
360
gcagaactgg acataatggg aacagggctct gaagacaate aatccagggc tgcagtgggt
420
gctgagtcgt ggaagccctc cacttgaggg ggcagctggg cagtggcage tccttgga
480
tggctcagcc tctggacatc accccaccca accagagccc tggtctcttg tggatgtcca
540
cagatgagtg cctgggattg gtctcagcca ctatgggggg gatgtgcagg gagaggtgat
600
gagggagtgga gcaggactgt ctatgtgect ctgtctctcat cctgagggctt gggctctgaaa
660
ttggtgctgc agcactggca cgcgt
685

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<210> 308
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 308
 Met Leu Val Ser Asn Pro Ala Glu Leu Asp Ile Met Gly Thr Gly Ser
 1 5 10 15
 Glu Asp Asn Gln Ser Arg Ala Ala Val Gly Ala Glu Ser Gly Glu Ala
 20 25 30
 Ser Thr Trp Arg Gly Ser Trp Ala Val Ala Ala Pro Leu Glu Trp Leu
 35 40 45
 Ser Leu Trp Thr Ser Pro His Pro Thr Arg Ala Leu Ala Leu Ala Gly
 50 55 60
 Cys Pro Gln Met Ser Ala Trp Asp Trp Ser Gln Pro Leu Trp Gly Gly
 65 70 75 80
 Cys Ala Gly Arg Gly Asp Glu Gly Val Ser Arg Thr Val Tyr Val Pro
 85 90 95
 Leu Ser Ser Ser
 100

<210> 309
 <211> 432
 <212> DNA
 <213> Homo sapiens

<400> 309
 caggctcgta ctattcgtat cccctgtgcat atgggtcgagg tcatcaataa gctggctcgc
 60
 gtccagcgct agatgctcca ggacctaggt cgtgagccca ccccggaaga gcttgccaac
 120
 gaactcgata tgaccgcaga gaaggtcatt gaggtgcaga aatacggctc cgagccgac
 180
 tcgctgcata cccactggg tgggatggc gattctgagt tcggtgacct tattgaggat
 240
 tcggagccca tcgtgccagc agacgcccgc aacttcaccc tgttcgagga gcagctgcac
 300
 gatgtcctct ataccttgct cgagcgagag gccggtgtgc tgtcgatgctg attcggccttg
 360
 accgacggac agcccaagac cctggatgag atcgggcaaag tctacggtgt tactcgggag
 420
 cgcacccgcc ag
 432

<210> 310
 <211> 144
 <212> PRT
 <213> Homo sapiens

<400> 310
 Gln Ala Arg Thr Ile Arg Ile Pro Val His Met Val Glu Val Ile Asn
 1 5 10 15
 Lys Leu Ala Arg Val Gln Arg Gln Met Leu Gln Asp Leu Gly Arg Glu

```

                20                25                30
Pro Thr Pro Glu Glu Leu Ala Asn Glu Leu Asp Met Thr Ala Glu Lys
      35      40      45
Val Ile Glu Val Gln Lys Tyr Gly Arg Glu Pro Ile Ser Leu His Thr
      50      55      60
Pro Leu Gly Glu Asp Gly Asp Ser Glu Phe Gly Asp Leu Ile Glu Asp
      65      70      75      80
Ser Glu Ala Ile Val Pro Ala Asp Ala Val Asn Phe Thr Leu Leu Gln
      85      90      95
Glu Gln Leu His Asp Val Leu Asp Thr Leu Ser Glu Arg Glu Ala Gly
      100      105      110
Val Val Ser Met Arg Phe Gly Leu Thr Asp Gly Gln Pro Lys Thr Leu
      115      120      125
Asp Glu Ile Gly Lys Val Tyr Gly Val Thr Arg Glu Arg Ile Arg Gln
      130      135      140

<210> 311
<211> 358
<212> DNA
<213> Homo sapiens

<400> 311
acgcgtatcg aaaatatccc tccattatt accgctcgcc ctgaactgat ggctcatgaa
60
ctgagccag aatctcttga tgcgagcctg gagtgggccc atgtgggtgt cattggctct
120
ggactgggac aacaagcgtg gggcaaaaaa gcgctacaaa aggtcgagaa ttgtcgtaaa
180
cogatgctgt gggatgccga cgcgcttaac ctcttgccaa tcaatcctga taaacgtcac
240
aatcgcatcc tgacgccaca ccccggcgag gccgcgcggc tgcttagctg cagcgctgcg
300
gaaattgaaa acgatcgctt acttntctgc gcacgtctgg taaaacggta acccgagt
358

<210> 312
<211> 116
<212> PRT
<213> Homo sapiens

<400> 312
Thr Arg Ile Glu Asn Ile Pro Pro Ile Ile Thr Ala Arg Pro Glu Leu
1      5      10      15
Met Ala His Glu Leu Thr Pro Glu Ser Leu Asp Ala Ser Leu Glu Trp
      20      25      30
Ala Asp Val Val Val Ile Gly Pro Gly Leu Gly Gln Gln Ala Trp Gly
      35      40      45
Lys Lys Ala Leu Gln Lys Val Glu Asn Cys Arg Lys Pro Met Leu Trp
      50      55      60
Asp Ala Asp Ala Leu Asn Leu Leu Ala Ile Asn Pro Asp Lys Arg His
      65      70      75      80
Asn Arg Ile Leu Thr Pro His Pro Gly Glu Ala Ala Arg Leu Leu Ser
      85      90      95
Cys Ser Val Ala Glu Ile Glu Asn Asp Arg Leu Leu Xaa Cys Ala Arg

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100
 Leu Val Lys Arg
 115
 <210> 313
 <211> 347
 <212> DNA
 <213> Homo sapiens
 <400> 313
 ncaactgaaa gcattgagat gagcgacgtg ctgtcccccct tccaccccac caaggccaac
 60
 acccctgggtg gcgaaccgcg caccatccgc acctcgaaacg cgcacatcat tgcgcgtcacc
 120
 agtggc aaaag gcgcgctggg caagaccttt gtctccgccca acctggccgc cgcgctgacc
 180
 cgctggggac tgcgcgtgct ggtactggac gccgacctgg gcctggccaa cttggagctg
 240
 gtgctgaacc tctaccccaa ggtgacgctg cactgatgtg taccggcaa ggcctcgctg
 300
 caagacgcgg tggtcacggc ccccgggcgc ttccatgtgc tgetagc
 347
 <210> 314
 <211> 115
 <212> PRT
 <213> Homo sapiens
 <400> 314
 Xaa Thr Glu Ser Ile Glu Met Ser Asp Val Leu Ser Pro Phe His Pro
 1 5 10 15
 Thr Lys Ala Asn Thr Pro Gly Gly Glu Pro Arg Thr Ile Arg Thr Ser
 20 25 30
 Asn Ala His Ile Ile Ala Val Thr Ser Gly Lys Gly Gly Val Gly Lys
 35 40 45
 Thr Phe Val Ser Ala Asn Leu Ala Ala Leu Thr Arg Leu Gly Leu
 50 55 60
 Arg Val Leu Val Leu Asp Ala Asp Leu Gly Leu Ala Asn Leu Asp Val
 65 70 75 80
 Val Leu Asn Leu Tyr Pro Lys Val Thr Leu His Asp Val Phe Thr Gly
 85 90 95
 Lys Ala Ser Leu Gln Asp Ala Val Val Thr Ala Pro Gly Gly Phe His
 100 105 110
 Val Leu Leu
 115
 <210> 315
 <211> 544
 <212> DNA
 <213> Homo sapiens
 <400> 315
 nnacgcgttc gtcaacagga aaacaacaac ggcttctcgc tggaggggaac catgcttgcc
 60

gaagatatct acgcgatcat gctgttttca tgcgtcatcc tggctgtccc ggggcacatcc
 120
 aacacactgc tgcgtcagcgc cgttttccat ttgggtcgcg tgcggggggc gcccttcac
 180
 ctgcttgagg cgttgggcta ctgcctatcc atttcggcat ggggctgggt attggcgcgc
 240
 ctgtccgaga gcaatccatg gatcatcagt ctgaccaagg cactctgcgc gctatatgtg
 300
 gcgctttcgg cgggtgaagac ctggaatgcc ntgcgtcgcg agtcgggggc cggtaacctc
 360
 cgccatgggc cctgcacct gtctgtggca accctgtcga acccgaaggc gctgatcttc
 420
 gccagcgtga tctttcccg caagcggttc ctgacattct ggaacaacta cagcatctcg
 480
 ctgtggcct tctcgttgt gctggcgccc atcgggatgc ttgggtcgg gctgggggcc
 540
 ggta
 544

<210> 316

<211> 159

<212> PRT

<213> Homo sapiens

<400> 316

Ile Tyr Ala Ile Met Leu Phe Ser Ser Leu Ile Leu Val Val Pro Gly
 1 5 10 15
 Pro Ser Asn Thr Leu Leu Leu Ser Ala Arg Phe His Phe Gly Ser Leu
 20 25 30
 Arg Ala Ala Pro Phe Ile Leu Leu Glu Ala Leu Gly Tyr Ser Leu Ser
 35 40 45
 Ile Ser Ala Trp Gly Trp Val Leu Ala Arg Leu Ser Glu Ser Asn Pro
 50 55 60
 Trp Ile Ile Ser Leu Thr Lys Ala Leu Cys Ala Leu Tyr Val Ala Leu
 65 70 75 80
 Leu Ala Val Lys Thr Trp Asn Ala Xaa Asp Pro Gln Cys Gly Ala Gly
 85 90 95
 Asn Phe Arg His Gly Pro Leu Pro Leu Phe Val Ala Thr Leu Ser Asn
 100 105 110
 Pro Lys Ala Leu Ile Phe Ala Ser Val Ile Phe Pro Gly Lys Ala Phe
 115 120 125
 Leu Asp Phe Trp Asn Asn Tyr Thr Ile Ser Leu Leu Ala Phe Leu Val
 130 135 140
 Val Leu Ala Pro Ile Gly Met Leu Trp Val Gly Leu Gly Ala Gly
 145 150 155

<210> 317

<211> 343

<212> DNA

<213> Homo sapiens

<400> 317

nggtcagcct ctgcgccagg caattctctt aagatacatg agctgctatg agtaccaaag
 60

ccagaggttt gtccactgag agaagcacat tggaaagggg ggcgtgggcc tgggactgtg
 120
 tggcacttta tgcacggggg gggcctaagg gggnggtcc accaaccatg cactgngggg
 180
 ggggtgtggg taacatgccg tgcattttgg ggggtgtcca tgagtggcac accatggggg
 240
 tggcatgtgg ggcattgatg catgtggtgt tggcgagca aactcagetc ttacctgggt
 300
 ggggccagcc tctaaaactt ctcacattgg gctcccttct gac
 343

<210> 318

<211> 98

<212> PRT

<213> Homo sapiens

<400> 318

Met	Ser	Thr	Lys	Ala	Arg	Gly	Leu	Ser	Thr	Glu	Arg	Ser	Thr	Leu	Glu
1			5				10			15					
Arg	Gly	Ala	Trp	Ala	Trp	Asp	Cys	Val	Ala	Leu	Tyr	Ala	Arg	Gly	Gly
		20				25				30					
Pro	Lys	Gly	Gly	Gly	Pro	Pro	Thr	Met	His	Xaa	Gly	Trp	Gly	Val	Gly
		35				40				45					
Asn	Met	Pro	Cys	Ile	Leu	Gly	Val	Cys	His	Glu	Trp	His	Thr	Met	Gly
	50				55					60					
Val	Ala	Cys	Gly	Ala	Cys	Met	His	Val	Val	Leu	Ala	Gln	Gln	Thr	Gln
	65				70					75					80
Leu	Leu	Pro	Gly	Trp	Gly	Gln	Pro	Leu	Lys	Leu	Leu	Thr	Leu	Gly	Ser
				85				90						95	

Leu Leu

<210> 319

<211> 429

<212> DNA

<213> Homo sapiens

<400> 319

gaattctcga tgtacccctt cccggcagtc ctattctcga gctgagcggg cacagtggcc
 60
 ccgttaacag tgtggcttgg ggtccacca gccagagcac gttgcgaat ggacctagta
 120
 agggcatgat atgtacagga ggcgacgatg ctcaagtgcct cgtatatgat ctgactagct
 180
 caactcttcg aacagcatct gctcaaggac ggcgctctcg aaacagtcca tataaaca
 240
 gccattcacc ggaatagac ggaatggcgtg tcggcgagca agtgccggtg ctgcgttata
 300
 cggccccgtc tatgtccaac aatgctagct ggctcgcatg gctgcgcca tcaaaacgca
 360
 catcgctaca gagcaaacac cgcagccttt accgcagctt actcagttag tggactgagt
 420
 atacgtccn
 429

<210> 320
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 320
 Met Ile Cys Thr Gly Gly Asp Asp Ala Gln Cys Leu Val Tyr Asp Leu
 1 5 10 15
 Thr Ser Ser Thr Leu Arg Thr Ala Ser Ala Gln Gly Arg Arg Ser Arg
 20 25 30
 Asn Ser Pro Tyr Lys Gln Ser His Ser Pro Gly Ile Asp Gly Trp Arg
 35 40 45
 Val Gly Ala Glu Val Pro Val Leu Ala Tyr Thr Ala Pro Ser Met Val
 50 55 60
 Asn Asn Ala Ser Trp Leu Gly Met Pro Ala Pro Ser Lys Arg Thr Ser
 65 70 75 80
 Leu Gln Ser Lys His Arg Ser Leu Tyr Arg Ser Leu Leu Ser Glu Trp
 85 90 95
 Thr Glu Tyr Thr Ser
 100

<210> 321
 <211> 530
 <212> DNA
 <213> Homo sapiens

<400> 321
 ngtgcacgac gtgctcgcca agtccctcgg gtcctctaata gcatcaacg tggttcacgc
 60
 caccgtcgat gcgttcgagc agctcgagga gcccgaaagag gtcgcccgtc gccgcggcaa
 120
 gtccggttgag gagatcgccc cagcagccat gctgcgtgag cgcaaggagg ccgacgaggc
 180
 cgccgctgct gcccgcatgg aggaaaaggc ggggggttaac tgatgagcaa gctgaagatc
 240
 acccagatca agtctggcat cgctaccaag ccaaatcatc gtgagaccct gcgcagcctc
 300
 ggactgaagc gtattggtga cagggtcatc aaggaggacc gcccgagatt ccgcggcatg
 360
 gtccggaccg ttctgcacct cgtcaccatg gaagagggtg actgacatgg ctattgagct
 420
 ccatgacctc aagcccgctc ctgggtgccc caaggccaag acccgcggtg gtcgtggtga
 480
 ggggtccaag ggtaagacog ctggtcgcgg taccaagggc accggtgcac
 530

<210> 322
 <211> 60
 <212> PRT
 <213> Homo sapiens

<400> 322
 Met Ser Lys Leu Lys Ile Thr Gln Ile Lys Ser Gly Ile Ala Thr Lys

```

1           5           10           15
Pro Asn His Arg Glu Thr Leu Arg Ser Leu Gly Leu Lys Arg Ile Gly
20           25           30
Asp Thr Val Ile Lys Glu Asp Arg Pro Glu Phe Arg Gly Met Val Arg
35           40           45
Thr Val Arg His Leu Val Thr Met Glu Glu Val Asp
50           55           60

<210> 323
<211> 468
<212> DNA
<213> Homo sapiens

<400> 323
ntccgggacc gctgtggcca cgtattctgc cgttcctgta ttgctaccag tctaaagaac
60
aacaagtgga cctgtcctta ttgccgggca tatcttcctt cagaaggagt tccagcaact
120
gatgtagcca aaagaatgaa atcagagtat aagaactgcg ctgagtgtga caccctgggt
180
tgccctcagt aaatgagggc acatattcgg acttgtcaga agtacataga taagtatgga
240
ccactacaag aacttgagga gacagcagca aggtgtgtat gtcccttttg tcagagggaa
300
ctgtatgaag acagcttgct ggatcattgt attactcatc acagatcgga acggaggcct
360
gtgttctgtc cactttgcca tttataccc gatgagaatc caagcagctt cagtggcagt
420
ttaataagac atctgcaagt tagtcacact ttggtttatg atgatttc
468

<210> 324
<211> 156
<212> PRT
<213> Homo sapiens

<400> 324
Xaa Arg Thr Arg Cys Gly His Val Phe Cys Arg Ser Cys Ile Ala Thr
1           5           10           15
Ser Leu Lys Asn Asn Lys Trp Thr Cys Pro Tyr Cys Arg Ala Tyr Leu
20           25           30
Pro Ser Glu Gly Val Pro Ala Thr Asp Val Ala Lys Arg Met Lys Ser
35           40           45
Glu Tyr Lys Asn Cys Ala Glu Cys Asp Thr Leu Val Cys Leu Ser Glu
50           55           60
Met Arg Ala His Ile Arg Thr Cys Gln Lys Tyr Ile Asp Lys Tyr Gly
65           70           75           80
Pro Leu Gln Glu Leu Glu Glu Thr Ala Ala Arg Cys Val Cys Pro Phe
85           90           95
Cys Gln Arg Glu Leu Tyr Glu Asp Ser Leu Leu Asp His Cys Ile Thr
100          105          110
His His Arg Ser Glu Arg Arg Pro Val Phe Cys Pro Leu Cys His Leu
115          120          125
Ile Pro Asp Glu Asn Pro Ser Ser Phe Ser Gly Ser Leu Ile Arg His

```

130 135 140
 Leu Gln Val Ser His Thr Leu Val Tyr Asp Asp Phe
 145 150 155

<210> 325
 <211> 374
 <212> DNA
 <213> Homo sapiens

<400> 325
 acgcgtgaag ggaggacgag gaagtaacgg gaagcacaag gccgctgctg gggagatggc
 60
 actggagccc cctaggaagc atctcacagg ctgtggccct tggcacgggg atctggggcc
 120
 aggtcgagcg caggtctggg tatcatgcga gtgcgggctc gctggggcgg gaaagagttt
 180
 ggagctctgc tcccaggga tcccactcc cgcagatgac ttgcccgaga gagtcttgct
 240
 ggtggatttt gatggaaatt ctatttgatc gcacccactt ggttcaactgt gtgcttccgg
 300
 gtcccacagg ttaggtgct tcatgccctg ctgggaacga gacacgtccc tgccctcagt
 360
 gaatcttcag tcta
 374

<210> 326
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 326
 Met Lys His Leu Lys Pro Gly Asp Pro Glu Ala His Ser Glu Pro Ser
 1 5 10 15
 Gly Cys Asp Gln Ile Glu Phe Pro Ser Lys Ser Thr Ser Arg Thr Leu
 20 25 30
 Ser Gly Lys Ser Ser Ala Gly Val Gly Ile Pro Trp Glu Gln Ser Ser
 35 40 45
 Lys Leu Phe Pro Ala Pro Ala Ser Pro His Ser His Asp Thr Gln Thr
 50 55 60
 Cys Ala Arg Pro Gly Pro Arg Ser Pro Cys Gln Gly Pro Gln Pro Val
 65 70 75 80
 Arg Cys Phe Leu Gly Gly Ser Ser Ala Ile Ser Pro Ala Ala Ala Leu
 85 90 95
 Cys Phe Pro Leu Leu Pro Arg Pro Pro Phe Thr Arg
 100 105

<210> 327
 <211> 538
 <212> DNA
 <213> Homo sapiens

<400> 327
 cactataaaa tccagtttgg ggcccggtgt ctttcctatt ggtctgtcag gtgaaaaact
 60

ccggctgggg gaaaagcgtc cggtaggttg ttggtaaaga gggtagcgtga tgggctctgg
 120
 ggaatggagg atggcgccac ggctgtgggt ggactgtgga aacggggggg ggcagtgccg
 180
 gggtagttgt cctgctgggc tggttttggg atcctggggt ggagaaatgc gatccaaaag
 240
 agctcgggat gggctcagag cgacccacga aaataccagg ggccaagtaa aatgaaccca
 300
 ccctttaaca gtgcacaaa gctgggcaca cgggccacgt ctggtgacgc aggctgcccc
 360
 aagcgctcca accattttgc aaacctggga gagcaagagg ggctctgcag gtctagccgc
 420
 cgccccgtgc ccactctggc cagccggagt ttttcaccta cagaccaata ggaagaaca
 480
 cgggcccaca actggatttt atagtctgag ctctcagcat ctaaggaatg atatgccc
 538

<210> 328

<211> 125

<212> PRT

<213> Homo sapiens

<400> 328

Met	Val	Gly	Ala	Leu	Arg	Ala	Ala	Cys	Val	Thr	Arg	Arg	Gly	Pro	Cys
1				5					10					15	
Ala	Ser	Ala	Leu	Cys	Thr	Val	Lys	Gly	Trp	Val	His	Phe	Thr	Trp	Pro
			20					25					30		
Leu	Val	Phe	Ser	Trp	Val	Ala	Leu	Ser	Pro	Ser	Arg	Ala	Leu	Leu	Asp
		35					40					45			
Arg	Ile	Ser	Pro	Ala	Gln	Asp	Pro	Lys	Thr	Arg	Pro	Ala	Gly	Gln	Leu
		50				55					60				
Pro	Arg	His	Cys	His	Pro	Pro	Phe	Pro	Gln	Ser	Thr	His	Ser	Arg	Cys
		65				70				75				80	
Ala	Ile	Leu	His	Ser	Pro	Glu	Pro	Ile	Thr	His	Pro	Leu	Tyr	Gln	Gln
			85						90					95	
Thr	Thr	Gly	Arg	Phe	Ser	Pro	Ser	Arg	Ser	Phe	Ser	Pro	Asp	Arg	Pro
			100					105					110		
Ile	Gly	Lys	Asn	Thr	Gly	Pro	Lys	Leu	Asp	Phe	Ile	Val			
		115					120					125			

<210> 329

<211> 407

<212> DNA

<213> Homo sapiens

<400> 329

tccggagagt tccctcccca ggaattcctt ctaagaatcc atgtggaaat agagcctgaa
 60
 gctcttcagt cttctgtctc cactgagcag tgttttctct atacccttgg tatcctgccca
 120
 gcagcctcgt tatgactcct aactccattg ccttccatgg cccctggggc ctctctctct
 180
 cttctctccc aggtagtaga gcactgcttc tggcttcttg tgcacagaag ggtttcccac
 240

agctgagagc tgggctccta ctgacatagt tatttccttt atatcctgcc ccaccttttt
 300
 ctggtagcac acagcaacct tgcatagttag ctggtatcat taccttccca atcaacaggc
 360
 cttgatttct tataggactt ttctctcag atttacattg ctctctt
 407

<210> 330

<211> 113

<212> PRT

<213> Homo sapiens

<400> 330

Met Ile Pro Ala Thr Met Gln Gly Cys Cys Val Leu Pro Glu Glu Gly
 1 5 10 15
 Gly Ala Gly Tyr Lys Gly Asn Asn Tyr Val Ser Arg Ser Pro Ala Leu
 20 25 30
 Ser Cys Gly Lys Pro Phe Cys Ala Gln Glu Ala Arg Ser Ser Ala Leu
 35 40 45
 Leu Pro Gly Glu Lys Glu Arg Glu Ser Ala Gln Gly Pro Trp Arg Ala
 50 55 60
 Met Glu Leu Gly Val Ile Thr Arg Leu Leu Ala Gly Tyr Gln Gly Tyr
 65 70 75 80
 Gln Glu Asn Thr Ala Gln Trp Ser Arg Lys Thr Glu Glu Leu Gln Ala
 85 90 95
 Leu Phe Pro His Gly Phe Leu Glu Gly Ile Pro Gly Glu Gly Thr Leu
 100 105 110
 Arg

<210> 331

<211> 523

<212> DNA

<213> Homo sapiens

<400> 331

tgtaccgaac ctgctggtct cgagggcctt gctgggctcg tcgtacgcac agctgacgaa
 60
 tccaccggcc cccatcccgg cgccacttct gctgaggcca tggagtcgat cggagccagg
 120
 tacgacggat cggccggggtt ggccgggaagt cacgtcggcg tcgatgtgcc cgtgacaagg
 180
 ttgcacgcag cggctgaact ctctgctcgaa ttgttgaaca ccacgagcct ggttgaagag
 240
 gacatcgccc gtcagatcga cgcggcgcca gcctccctgg ccagaccag ccagcgccga
 300
 tcggccctag ccgagatggc agcagcacgt gcgctatggc cagtggggtc acggtcgtcc
 360
 ctgccccaga tcggtaccct ctctcgggtg gaaaagctca acgccgcagc cgcacgagaa
 420
 ttctgggccc cgcactggac gatctccgat gccgtgctgg tggttgcggg agagggagtc
 480
 gaggacctcg acttgtcaat attcaaggag tggacgacca gct
 523

<210> 332

<211> 174

<212> PRT

<213> Homo sapiens

<400> 332

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Cys Thr Glu Pro Ala Gly Leu Glu Gly Leu Ala Gly Leu Val Val Arg
 1             5             10             15
Thr Ala Asp Glu Ser Thr Gly Pro His Pro Gly Ala Thr Phe Ala Glu
 20             25             30
Ala Met Glu Ser Ile Gly Ala Ser Tyr Asp Gly Ser Ala Gly Leu Ala
 35             40             45
Gly Ser His Val Gly Val Asp Val Pro Val Thr Arg Phe Asp Ala Ala
 50             55             60
Ala Glu Leu Phe Val Glu Leu Leu Asn Thr Thr Ser Leu Val Glu Glu
 65             70             75             80
Asp Ile Ala Arg Gln Ile Asp Ala Ala Arg Ala Ser Leu Ala Gln Thr
 85             90             95
Ser Gln Arg Gly Ser Ala Leu Ala Glu Met Ala Ala Ala Arg Ala Leu
100            105            110
Trp Pro Val Gly Ser Arg Ser Ser Leu Pro Thr Ile Gly Thr Leu Ser
115            120            125
Ser Val Glu Lys Leu Asn Ala Ala Ala Arg Glu Phe Trp Ala Ala
130            135            140
His Trp Thr Ile Ser Asp Ala Val Leu Val Val Ala Gly Glu Gly Val
145            150            155            160
Glu Asp Leu Asp Leu Ser Ile Phe Lys Glu Trp Thr Thr Ser
165            170

```

<210> 333

<211> 372

<212> DNA

<213> Homo sapiens

<400> 333

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nntgttcgtc gtgtcgaccc ggaactcaag gccaggcgga tgacggtgaa ggtgcccaacc
60
gatcccccac accgcccgagg agttccattg aagtctcgca aggaccgtat ggacatcatt
120
tctgcttacc gagaactcgg aagctatcgc gccgcagccg aggtgtgcgg caccacccac
180
aagaccgtca agcgggtggt cgatecgggtt gaagccggcg atccaccacc cggtggcgaag
240
gaacggggccc gcaactacga tgcgggtggcc cagctcgtcg cgcagcgagt cgcgcgggtca
300
cacggccgga tcactgccaa acggtctgcta ccggtagcgc gagcggcgagg atatgagggg
360
tcggcgcgga at
372

```

<210> 334

<211> 88

<212> PRT

<213> Homo sapiens

<400> 334

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Met Asp Ile Ile Ser Ala Tyr Arg Glu Leu Gly Ser Tyr Arg Ala Ala
 1           5           10           15
Ala Glu Val Cys Gly Thr Thr His Lys Thr Val Lys Arg Val Val Asp
          20           25           30
Arg Phe Glu Ala Gly Asp Pro Pro Thr Gly Gly Lys Glu Arg Ala Arg
          35           40           45
Asn Tyr Asp Ala Val Ala Gln Leu Val Ala Gln Arg Val Ala Arg Ser
          50           55           60
His Gly Arg Ile Thr Ala Lys Arg Leu Leu Pro Val Ala Arg Ala Ala
65           70           75           80
Gly Tyr Glu Gly Ser Ala Arg Asn
          85

```

<210> 335

<211> 356

<212> DNA

<213> Homo sapiens

<400> 335

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gtgcacgcct tgctgggcga gggcgatgog cctgcgcgca ccttcgtgga cggtacacatt
60
ggcaggggag ggcattcgcg gctcatcctg cagcggctgg gccgcgaagg ccgcctgggtg
120
gcgttcgaca aggacaccga agccattcaa gcagcggcgc gcattcacgga tcgcgccttt
180
tccatcnggc accagggggt cagccatctc ggggaactgc ccgcgccag cgtgtccggt
240
gtgctgctgg acctgggcgt gagctcccg cagatcgacg acccccagcg cgggttcagt
300
tttcgtttcg atggtccgct ggacatgcgc atggacacca ctccgatgca tggatg
356

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<210> 336

<211> 118

<212> PRT

<213> Homo sapiens

<400> 336

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Val His Ala Leu Leu Gly Glu Gly Asp Ala Pro Ala Arg Thr Phe Val
 1           5           10           15
Asp Gly Thr Phe Gly Arg Gly Gly His Ser Arg Leu Ile Leu Gln Arg
          20           25           30
Leu Gly Pro Gln Gly Arg Leu Val Ala Phe Asp Lys Asp Thr Glu Ala
          35           40           45
Ile Gln Ala Ala Ala Arg Ile Thr Asp Ala Arg Phe Ser Ile Xaa His
          50           55           60
Gln Gly Phe Ser His Leu Gly Glu Leu Pro Ala Ala Ser Val Ser Gly
65           70           75           80
Val Leu Leu Asp Leu Gly Val Ser Ser Pro Gln Ile Asp Asp Pro Gln
          85           90           95
Arg Gly Phe Ser Phe Arg Phe Asp Gly Pro Leu Asp Met Arg Met Asp

```

100 105 110
 Thr Thr Pro Met His Gly
 115
 <210> 337
 <211> 447
 <212> DNA
 <213> Homo sapiens
 <400> 337
 cagcctctct cgcaccgcgc cgggtgtgaag caccgggcatg ccggtgtgca agtggcacca
 60
 cagccaaaac agcgaagtca cacttcaaac tccttcaaag accccaggcc tctgtaagaa
 120
 ccgctcatct ctgtgcccac agctcccccgc ctcccatgtg acccagaaat ggaaccacgc
 180
 agcagaggcg gggatcacag gtgaagcagc tgtgaacatt tgcttcaggc ttctgtgcaa
 240
 acaggcgcca tcatgtcagc cgggtgagcag gagcaacgtg cgtgggtcag ggggtggcca
 300
 cactgtccaa tttataagaa atgacagatt ccctgatggc catagggatc tgcaggggcca
 360
 gcagcaggca taggacttcc ggtggccctg cgtcttcac aacactgagt attgtcaggg
 420
 tttctgtact gtttttacag ccaattg
 447
 <210> 338
 <211> 111
 <212> PRT
 <213> Homo sapiens
 <400> 338
 Met Pro Val Cys Lys Trp His His Ser Gln Asn Ser Glu Leu Thr Leu
 1 5 10 15
 Gln Thr Pro Ser Lys Thr Pro Gly Leu Cys Lys Asn Arg Ser Ser Leu
 20 25 30
 Cys Pro Gln Leu Pro Arg Phe His Val Thr Gln Lys Trp Asn His Ala
 35 40 45
 Ala Glu Ala Gly Ile Thr Gly Glu Ala Ala Val Asn Ile Cys Phe Arg
 50 55 60
 Leu Leu Cys Lys Gln Ala Pro Ser Cys Gln Pro Val Ser Arg Ser Asn
 65 70 75 80
 Val Arg Gly Ser Gly Gly Gly His Thr Ser Asn Phe Ile Arg Asn Asp
 85 90 95
 Arg Phe Pro Asp Gly His Arg Asp Leu Gln Gly Gln Gln Ala
 100 105 110
 <210> 339
 <211> 588
 <212> DNA
 <213> Homo sapiens
 <400> 339

tctagaatga agcgctgtat cctagcaccg gcagacgtac caagactatc aagggcgctca
 60
 gatcgtttat cctgcagttg ccattcatca gacaaatcca gtggaaccca atggaagaca
 120
 ccgacctgca agcgctgatg gccagactcg aattgctaata tgatcgggtc gagcaactta
 180
 agagtcaaaa cggaactccta ttagctcagg aaaagacctg ggcgcganaa cgcgctcacc
 240
 tcattgaaaa aaacgaaatc gcccgcgcta aggtcgaatc gatgatttcg cgctgaaggg
 300
 ccttgagca agactatgag ttaagcaata gcgttacgtg cagatcctcg acaagaata
 360
 ttcatcatc tgcccccagg aagaacgcag cacctgggtg gtgctgcccgc ctacctggaa
 420
 ggccaaaagg cgtgaaatcc gcagcagcgg caaagtcacg ggtgccgacc gcacgcgcgt
 480
 gatggccgcg ctgaacatca cccacgatct gctgcataag caggaacggc ctgacgttca
 540
 ggccagcggc tcaacgcgcg agcaagtgcg tgacctgctg gaacgcgt
 588

<210> 340

<211> 123

<212> PRT

<213> Homo sapiens

<400> 340

Met Glu Asp Thr Asp Leu Gln Ala Leu Met Ala Arg Leu Glu Leu Leu
 1 5 10 15
 Ile Asp Arg Val Glu Gln Leu Lys Ser Gln Asn Gly Leu Leu Leu Ala
 20 25 30
 Gln Glu Lys Thr Trp Ala Arg Xaa Arg Ala His Leu Ile Glu Lys Asn
 35 40 45
 Glu Ile Ala Arg Arg Lys Val Glu Ser Met Ile Ser Arg Leu Lys Ala
 50 55 60
 Leu Glu Gln Asp Tyr Glu Leu Ser Asn Ser Val Thr Cys Arg Ser Ser
 65 70 75 80
 Thr Lys Asn Ile Arg Ser Ser Ala Pro Arg Lys Asn Ala Ala Pro Gly
 85 90 95
 Glu Cys Cys Pro Leu Pro Gly Arg Pro Lys Gly Val Lys Ser Ala Ala
 100 105 110
 Ala Ala Lys Ser Ser Val Pro Thr Ala Ser Pro
 115 120

<210> 341

<211> 401

<212> DNA

<213> Homo sapiens

<400> 341

ngccgcgcgg cctacctgct gtacctggcc tatgccacct ggcgtgaccg ctcggccttt
 60
 gcaatgaacg acacgccgac agttgcgacc gcgcgcagcc tgatcctgcg tggcttcttg
 120

ctgaacattc ttaaccccaa gctgacaatt ttcttctctgg ccttcctgcc tcaattcgta
 180
 acgccagcgc gcaccgcgcg ggccttgtag atgctggtag tgagcggcgt gttcatggcg
 240
 atgacgcttg cagtgtttgt gctgtatggc ctggtggcga atgtgtttcg tcgtgcagtg
 300
 gtcgagtcgc cagctgtgca gaactggctg cgacgcagtt ttgccacggc ctttgccggg
 360
 ctgggggttg acctggcgtt tgcgcagcgc tggagcgcg t
 401

<210> 342

<211> 130

<212> PRT

<213> Homo sapiens

<400> 342

Xaa Arg Ala Ala Tyr Leu Leu Tyr Leu Ala Tyr Ala Thr Trp Arg Asp
 1 5 10 15
 Arg Ser Ala Phe Ala Met Asn Asp Thr Pro Thr Val Ala Thr Ala Arg
 20 25 30
 Ser Leu Ile Leu Arg Gly Phe Leu Leu Asn Ile Leu Asn Pro Lys Leu
 35 40 45
 Thr Ile Phe Phe Leu Ala Phe Leu Pro Gln Phe Val Thr Pro Gly Gly
 50 55 60
 Thr Ala Pro Ala Leu Gln Met Leu Val Leu Ser Gly Val Phe Met Ala
 65 70 75 80
 Met Thr Leu Ala Val Phe Val Leu Tyr Gly Leu Leu Ala Asn Val Phe
 85 90 95
 Arg Arg Ala Val Val Glu Ser Pro Arg Val Gln Asn Trp Leu Arg Arg
 100 105 110
 Ser Phe Ala Thr Ala Phe Ala Gly Leu Gly Leu Asn Leu Ala Phe Ala
 115 120 125
 Gln Arg
 130

<210> 343

<211> 389

<212> DNA

<213> Homo sapiens

<400> 343

gtgttgcgca actacatggc gtccctggcg ttcagcgtgg tcgagtcggc gcgcacatgac
 60
 ggggtgctcca acttcacgat ctcttggaag ctgatcgccc cgatggcgat gccggcgatg
 120
 gcggcgcttcg cgaccctgca gtctctgtgg gtgtggaacg acctgctcat gcgcaagctc
 180
 ttctcaccac acgacaaccc caggtgatgc gtcaagctcc aacagctttc cnnngggcccc
 240
 aaggccacag gtgcggagct gctgacggcg ggcgccttca tctccatcgt gctaccacatg
 300
 atcgtctctt tcgtgctcca gaacttctcg gtgcgcggta tgacgtcggg tgccgtcaag
 360

gggtgaccgc tcaactgcag tggccccggg
389

<210> 344
<211> 121
<212> PRT
<213> Homo sapiens

<400> 344
Val Leu Arg Asn Tyr Met Ala Ser Leu Pro Phe Ser Val Val Glu Ser
1 5 10 15
Ala Arg Ile Asp Gly Cys Ser Asn Phe Gln Ile Phe Trp Lys Leu Ile
20 25 30
Ala Pro Met Ala Met Pro Ala Met Ala Ala Phe Ala Thr Leu Gln Phe
35 40 45
Leu Trp Val Trp Asn Asp Leu Leu Ile Ala Lys Leu Phe Leu Thr Asn
50 55 60
Asp Asn Pro Thr Val Ile Val Lys Leu Gln Gln Leu Ser Xaa Gly Pro
65 70 75 80
Lys Ala Gln Gly Ala Glu Leu Leu Thr Ala Gly Ala Phe Ile Ser Ile
85 90 95
Val Leu Pro Met Ile Val Phe Phe Val Leu Gln Asn Phe Leu Val Arg
100 105 110
Gly Met Thr Ser Gly Ala Val Lys Gly
115 120

<210> 345
<211> 360
<212> DNA
<213> Homo sapiens

<400> 345
ctagtacttt atgctgatgg tgaacgtcgt tacatccctg cccctaaagg catggttgct
60
ggtagatgta tcacatctgg tgaagatgca tcaattaaag taggtaactg cttaccgatg
120
cgtaatatc cagttggtac aacagtagac gctgtagaaa tgaaacctgc taaagggtgca
180
caaatggcac gttctgctgg ttcttacagc caaattatag ctctgtgatg tgcttacggt
240
actctacgtt tacgtagtgg tgaatgcgt aaaatccctg ctgagtgtcg tgcaacaatc
300
ggtagaagttg gtaatgcaga acatatgcta cgtcaactag gtaaagctgg tgctacgcgt
360

<210> 346
<211> 120
<212> PRT
<213> Homo sapiens

<400> 346
Leu Val Leu Tyr Ala Asp Gly Glu Arg Arg Tyr Ile Leu Ala Pro Lys
1 5 10 15
Gly Met Val Ala Gly Asp Val Ile Gln Ser Gly Glu Asp Ala Ser Ile

```

                20                25                30
Lys Val Gly Asn Cys Leu Pro Met Arg Asn Ile Pro Val Gly Thr Thr
      35                40                45
Val His Ala Val Glu Met Lys Pro Ala Lys Gly Ala Gln Ile Ala Arg
      50                55                60
Ser Ala Gly Ser Tyr Ser Gln Ile Ile Ala Arg Asp Gly Ala Tyr Val
      65                70                75                80
Thr Leu Arg Leu Arg Ser Gly Glu Met Arg Lys Ile Pro Ala Glu Cys
      85                90                95
Arg Ala Thr Ile Gly Glu Val Gly Asn Ala Glu His Met Leu Arg Gln
      100                105                110
Leu Gly Lys Ala Gly Ala Thr Arg
      115                120

```

<210> 347

<211> 565

<212> DNA

<213> Homo sapiens

<400> 347

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accggtgatg ccaaggtgc tgtgacaagg ggattcatcg gttcgggcaa ggtcgtcacg
60
gcagctgcgc tcatcatgat ttcggtgttc gtcttcttca tccccgaggg catgaacgcc
120
atcaaggaaa tcgccctggc cctggccgctc gggatcctca cggatgcctt cttggtgcgg
180
atgaccctcg tcccgccgct gatggccctg ctagggtgaca aggcattggtg gttgcccggg
240
tggctggatc gacgccctacc ccgacctgac atcgaggagg aagggatcac ccacaggaaa
300
aagctggcgc cctggcccac agcggatcac accgaggccc tgcacgcga ggggatcggg
360
gtggaggggc tcttcgaagg cctcgatctg cacgtcgaa cgcgtcaggt gcaagccgtc
420
gtcggatcgc agaacagtgt ctcggccgctc ctgctggcga tcgggggacg gctgcctctg
480
gatcacggcc ggatgaggtc gggaggattg ctgctaccgc agcgggcttc cagagtgcgt
540
cgggtgacgt ggttctctga cgcgt
565

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<210> 348

<211> 188

<212> PRT

<213> Homo sapiens

<400> 348

```

Thr Gly Asp Ala Lys Gly Ala Val Thr Arg Gly Phe Ile Gly Ser Gly
      1                5                10                15
Lys Val Val Thr Ala Ala Ala Val Ile Met Ile Ser Val Phe Val Phe
      20                25                30
Phe Ile Pro Glu Gly Met Asn Ala Ile Lys Glu Ile Ala Leu Ala Leu
      35                40                45
Ala Val Gly Ile Leu Thr Asp Ala Phe Leu Val Arg Met Thr Leu Val

```

```

      50              55              60
Pro Ala Val Met Ala Leu Leu Gly Asp Lys Ala Trp Trp Leu Pro Gly
65              70              75              80
Trp Leu Asp Arg Arg Leu Pro Arg Leu Asp Ile Glu Gly Glu Gly Ile
      85              90              95
Thr His Glu Glu Lys Leu Ala Ala Trp Pro Thr Ala Asp His Thr Glu
      100             105             110
Ala Leu His Ala Glu Gly Ile Gly Val Glu Gly Leu Phe Glu Gly Leu
      115             120             125
Asp Leu His Val Glu Pro Arg Gln Val Gln Ala Val Val Gly Ser Gln
      130             135             140
Asn Ser Val Ser Ala Val Leu Leu Ala Ile Gly Gly Arg Leu Pro Leu
145             150             155             160
Asp His Gly Arg Met Arg Ser Gly Gly Leu Leu Leu Pro Glu Arg Ala
      165             170             175
Ser Arg Val Arg Arg Val Thr Trp Phe Leu Asp Ala
      180             185

```

<210> 349

<211> 339

<212> DNA

<213> Homo sapiens

<400> 349

```

ntgctggcca cggataatga ccgtactctg cgtgatgtcg ttgccgctga ccctacccat
60
gagctcggtt cggctaccgc tcatacgttt gcggacaatt tgccgttctt tcttaaaactg
120
ctcgcggcag aagagccact atcgttgcag gctcatccca gtttggcgca agcagaggaa
180
gggtacgggc gggagaatcg caaaggggtg ccattagatg cccagaccg gaattaccac
240
gatcccaacc ataaaccgga gcttattgtt gggctgacgc gattccacgc actagccggc
300
ttccgtgaac cacaacgcac acttgagctt tttgacgcg
339

```

<210> 350

<211> 113

<212> PRT

<213> Homo sapiens

<400> 350

```

Xaa Leu Ala Thr Asp Asn Asp Arg Thr Leu Arg Asp Val Val Ala Ala
1              5              10              15
Asp Pro Thr His Glu Leu Gly Ser Ala Thr Ala His Thr Phe Ala Asp
      20              25              30
Asn Leu Pro Phe Leu Leu Lys Leu Leu Ala Ala Glu Glu Pro Leu Ser
      35              40              45
Leu Gln Ala His Pro Ser Leu Ala Gln Ala Gln Glu Gly Tyr Gly Arg
      50              55              60
Glu Asn Arg Lys Gly Val Pro Leu Asp Ala Pro Asp Arg Asn Tyr His
65              70              75              80
Asp Pro Asn His Lys Pro Glu Leu Ile Val Gly Leu Thr Arg Phe His

```

85 90 95
 Ala Leu Ala Gly Phe Arg Glu Pro Gln Thr Leu Glu Leu Phe Asp
 100 105 110
 Ala

 <210> 351
 <211> 354
 <212> DNA
 <213> Homo sapiens

 <400> 351
 gcgcgcccc gtgccgagac ccggggcttc aggagccggc cccgggagag aagagtgcgg
 60
 cgcgggacgg agaaaaacaac tccaaagtgt gcgaaaggca cgcgccctac tcccgggctg
 120
 cgcgcgcctc cccgccccca gccctggcat ccagagtacg ggtcgagccc gnggccatgg
 180
 agcccccctg gggaggcggc accaggagac ctgggccccg gggctccgcc gcgaccccat
 240
 cgggtagacc acagaagctc cgggaccctt ccggcacctc tggacagccc aggatgctgt
 300
 tggccaccen ntctctctec tctctcttgg aggcgtctcg gcccatccag accg
 354

 <210> 352
 <211> 118
 <212> PRT
 <213> Homo sapiens

 <400> 352
 Ala Arg Pro Ser Ala Glu Thr Arg Gly Phe Arg Ser Arg Pro Arg Glu
 1 5 10 15
 Arg Arg Val Arg Arg Arg Thr Glu Lys Thr Thr Pro Lys Leu Ala Lys
 20 25 30
 Gly Thr Ala Pro Thr Pro Gly Leu Pro Pro Pro Arg Pro Gln Pro
 35 40 45
 Trp His Pro Glu Tyr Gly Ser Ser Pro Xaa Pro Trp Ser Pro Pro Gly
 50 55 60
 Glu Ala Ala Pro Gly Ser Leu Gly Pro Gly Ala Pro Pro Arg Pro His
 65 70 75 80
 Arg Val Asp His Arg Ser Ser Gly Thr Leu Pro Ala Pro Leu Asp Ser
 85 90 95
 Pro Gly Cys Cys Trp Pro Pro Xaa Pro Pro Pro Pro Trp Arg Arg
 100 105 110
 Ser Gly Pro Ser Arg Pro
 115

 <210> 353
 <211> 1469
 <212> DNA
 <213> Homo sapiens

 <400> 353

nntcatgaag gcttgaactt gcgtgatctt cagcctgcgg acctggcggg tgacggcggt
 60
 attgagccgg tggacctcgt ggtcggagat gtctctttaa tctccttgac gatgatcctt
 120
 gaacccattt cagctgttgt cagcccacac ggcctcatgc tgttgctggg gaagcctcaa
 180
 tttgaggttg gttgcaaggc tttgggagcc catggcggtg tcacggagccc ggcctgcgc
 240
 ttgcaggcca tcgcgggtgt catggcagca gcggtagatt tgggttgggc tatcgctgac
 300
 gagtgcgata gcccggtgccc cgggcaggat ggaacggtg agcacttcgt cttgctgaa
 360
 cgtacgggtc ggtgacagac gtccgggcat atcatgggccc gctactgtgg tcttgatgaac
 420
 gacacgagcc ctctgagata cgttgctgctc gtcaccatgc ccacgcggga cgacgctttt
 480
 gacgcggctg ccgaattcat ctctgaaatg gcggggcgag acattggttg cgcggttccg
 540
 gatgatcagg tgaagccgat gtcaagcaag ctgccaggga tcgatcttga aagcttggga
 600
 gagttcggcc acgaggcgga ggtggtgctc gtctttggcg gcgacggcac gatcttgca
 660
 gctgctgaat ggtcattacc tcgccacgtt cccatgattg gcgtcaacct tggccatgtc
 720
 ggttttcttg ctgagctgga gcgctccgat atggcggatc tagtgaacaa ggtgtgttgg
 780
 cgcgactaca ccgttgagga tcgcctcgtg cttaaaaacca ccgtcaccga gcattccgga
 840
 caacaccgtt ggagttcttt tgccgtcaac gagttgtctc tggaaaaggc agcccggcgg
 900
 cgcatgctcg acgttctggc gtctgtcgac gagttgccgg tgcaacgctg gagttgcgac
 960
 gggatccttg tctcgacccc gaccggatcg acggcctacg cgttctcagc tggcgcccg
 1020
 gtcattgtgg ccgatctcga cgcctgctc atggtgccgt tgagcgctca cgctctcttt
 1080
 gctcgaccgc tgggtcatgag ccagctgctc cgagtgagac ttgacatcca gccagacggt
 1140
 tcagaatcgg cggttctgtg gtgcgacggg cgcgatcgt gcaccgtacg accgggggaa
 1200
 agaattcaccg tcgtccgcca tccgaccgt ctgcgcatgg ctgctctggc cgcgagcccc
 1260
 ttcacatcgc gtctggtcaa gaagtttgag ctccgggtca gcgggtggcg tcagggtcgt
 1320
 gaccgtcatc acctagagga gacttcgtga tacgtagtgt gcgaattcgt ggaactcgcg
 1380
 tcactgatga gacggctcctc gaacctcat ccgcgctgac ggcagtcacc ggcgagacgg
 1440
 gcgcccggaaa gaccatgggtg gtcaccgggt
 1469

<210> 354

<211> 318

<212> PRT

<213> Homo sapiens

<400> 354

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Met Gly Arg Tyr Cys Gly Leu Val Asn Asp Thr Ser Pro Ser Arg Tyr
 1           5           10           15
Val Val Val Val Thr His Ala Thr Arg Asp Asp Ala Phe Asp Ala Ala
 20           25           30
Ala Glu Phe Ile Ser Glu Met Ala Gly Arg Asp Ile Gly Cys Ala Val
 35           40           45
Pro Asp Asp Gln Val Lys Pro Met Ser Ser Lys Leu Pro Gly Ile Asp
 50           55           60
Leu Glu Ser Leu Gly Glu Phe Ala His Glu Ala Glu Val Val Val Val
 65           70           75           80
Phe Gly Gly Asp Gly Thr Ile Leu Arg Ala Ala Glu Trp Ser Leu Pro
 85           90           95
Arg His Val Pro Met Ile Gly Val Asn Leu Gly His Val Gly Phe Leu
100          105          110
Ala Glu Leu Glu Arg Ser Asp Met Ala Asp Leu Val Asn Lys Val Cys
115          120          125
Ser Arg Asp Tyr Thr Val Glu Asp Arg Leu Val Leu Lys Thr Thr Val
130          135          140
Thr Glu His Ser Gly Gln His Arg Trp Ser Ser Phe Ala Val Asn Glu
145          150          155          160
Leu Ser Leu Glu Lys Ala Ala Arg Arg Arg Met Leu Asp Val Leu Ala
165          170          175
Ser Val Asp Glu Leu Pro Val Gln Arg Trp Ser Cys Asp Gly Ile Leu
180          185          190
Val Ser Thr Pro Thr Gly Ser Thr Ala Tyr Ala Phe Ser Ala Gly Gly
195          200          205
Pro Val Met Trp Pro Asp Leu Asp Ala Met Leu Met Val Pro Leu Ser
210          215          220
Ala His Ala Leu Phe Ala Arg Pro Leu Val Met Ser Pro Ala Ala Arg
225          230          235          240
Val Asp Leu Asp Ile Gln Pro Asp Gly Ser Glu Ser Ala Val Leu Trp
245          250          255
Cys Asp Gly Arg Arg Ser Cys Thr Val Arg Pro Gly Glu Arg Ile Thr
260          265          270
Val Val Arg His Pro Asp Arg Leu Arg Ile Ala Arg Leu Ala Ala Gln
275          280          285
Pro Phe Thr Ser Arg Leu Val Lys Lys Phe Glu Leu Pro Val Ser Gly
290          295          300
Trp Arg Gln Gly Arg Asp Arg His His Leu Glu Glu Thr Ser
305          310          315

```

<210> 355

<211> 558

<212> DNA

<213> Homo sapiens

<400> 355

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nggatccac ctctcggaat ggaacccac ataccagttc tcttcctoga tttgaatcg
 60
gatgacctca gtgccaatga gcagcttggt ggcccccatg catccggcgt gaactccatc
120

```

ctgccaagg agcatggcag ccagtttttc tacctgcccc tcataaagca cagtgatgat
 180
 gaggttttcag ccacagcctc ttgggattcc tcggtgcatg attctgttca ctggaatggg
 240
 gtcacaccac agaatagaaag gatttaccta attgtgaaaa ccacagtcca actcagccac
 300
 cctgctgcta tggagttagt attacgaaaa cgaattgcag ccaatatcca caacaacacg
 360
 agtttcacgc agagtgttgaa gaggagaata tccttgaaaa atatatttta ttctgtgggt
 420
 gtaacctatg aaatagtatc caatatacca aaggcaactg aggagataga ggaccgggaa
 480
 acgctggctc tcctggcagc aaggagtgaa aacgaaggca catcagatgg gaagacgtac
 540
 attgagaagt acactcga
 558

<210> 356

<211> 186

<212> PRT

<213> Homo sapiens

<400> 356

Xaa	Ile	Pro	Pro	Pro	Gly	Met	Glu	Thr	His	Ile	Pro	Val	Leu	Phe	Leu
1				5					10				15		
Asp	Leu	Asn	Ala	Asp	Asp	Leu	Ser	Ala	Asn	Glu	Gln	Leu	Val	Gly	Pro
		20					25					30			
His	Ala	Ser	Gly	Val	Asn	Ser	Ile	Leu	Pro	Lys	Glu	His	Gly	Ser	Gln
		35				40					45				
Phe	Phe	Tyr	Leu	Pro	Ile	Ile	Lys	His	Ser	Asp	Asp	Glu	Val	Ser	Ala
	50					55				60					
Thr	Ala	Ser	Trp	Asp	Ser	Ser	Val	His	Asp	Ser	Val	His	Leu	Asn	Gly
65				70					75				80		
Val	Thr	Pro	Gln	Asn	Glu	Arg	Ile	Tyr	Leu	Ile	Val	Lys	Thr	Thr	Val
			85					90				95			
Gln	Leu	Ser	His	Pro	Ala	Ala	Met	Glu	Leu	Val	Leu	Arg	Lys	Arg	Ile
		100					105					110			
Ala	Ala	Asn	Ile	Tyr	Asn	Lys	Gln	Ser	Phe	Thr	Gln	Ser	Leu	Lys	Arg
		115				120					125				
Arg	Ile	Ser	Leu	Lys	Asn	Ile	Phe	Tyr	Ser	Cys	Gly	Val	Thr	Tyr	Glu
	130					135				140					
Ile	Val	Ser	Asn	Ile	Pro	Lys	Ala	Thr	Glu	Glu	Ile	Glu	Asp	Arg	Glu
145				150					155				160		
Thr	Leu	Ala	Leu	Leu	Ala	Ala	Arg	Ser	Glu	Asn	Glu	Gly	Thr	Ser	Asp
			165						170				175		
Gly	Lys	Thr	Tyr	Ile	Glu	Lys	Tyr	Thr	Arg						
		180						185							

<210> 357

<211> 323

<212> DNA

<213> Homo sapiens

<400> 357

acgcgtgcgt gtgttgtgtg agtcgggtgt gtgcattcgt gtgggtgtgc agcaggtggg
 60
 gtacgatcag gctgaaggct gatcaggcac aaggctctgg gggagagccc tggttccagc
 120
 cctgggggtca gaggcagcagg gccagaaaag acggcagggg tgagcactgc acccgctggg
 180
 cagggcaggg ccacagaagg cagggcatgg agggcacgtg aagggcttga cagagtggat
 240
 ggatgtctcc ggaagcacct gcgtggccca gtcagcagga tcagactcgc atgtgtcagg
 300
 gtcaccatgg gtcagcagg atn
 323

<210> 358

<211> 102

<212> PRT

<213> Homo sapiens

<400> 358

Met	Val	Thr	Leu	Thr	His	Ala	Ser	Leu	Ile	Leu	Leu	Thr	Gly	Pro	Arg
1				5					10					15	
Arg	Cys	Phe	Arg	Arg	His	Pro	Ser	Thr	Leu	Ser	Ser	Pro	Ser	Arg	Gly
			20					25					30		
Leu	His	Ala	Leu	Pro	Ser	Val	Ala	Leu	Pro	Cys	Pro	Ala	Gly	Ala	Val
		35				40						45			
Leu	Thr	Pro	Ala	Val	Phe	Leu	Ala	Pro	Ala	Ala	Leu	Thr	Pro	Gly	Leu
		50				55					60				
Glu	Pro	Gly	Leu	Ser	Pro	Arg	Ala	Leu	Cys	Leu	Ile	Ser	Leu	Gln	Pro
65				70					75					80	
Asp	Arg	Thr	Pro	Pro	Ala	Ala	His	Pro	His	Ala	Cys	Thr	His	Pro	Thr
			85					90					95		
His	Thr	Thr	His	Ala	Arg										
			100												

<210> 359

<211> 265

<212> DNA

<213> Homo sapiens

<400> 359

acgcgtaccg acaagcgccc ggtgatggcc gaccttcgcg aatcggggcg aatcgagcag
 60
 gatcgggaca tgatcgtctt catctaccgc gacgattact acaacaagga aaattcgccg
 120
 gacaaggggc tggccgagat catcatcggc aagcatcggg ggggccccac cggctcgtgc
 180
 aagctgaagt tcttcggcga gtacaccggt ttgcacaacc tggcccacaa ctcggttggt
 240
 tcgttcgaat aacggatgat tccgg
 265

<210> 360

<211> 83

<212> PRT

<213> Homo sapiens

<400> 360

```

Thr Arg Thr Asp Lys Arg Pro Val Met Ala Asp Leu Arg Glu Ser Gly
 1             5             10             15
Ala Ile Glu Gln Asp Ala Asp Met Ile Val Phe Ile Tyr Arg Asp Asp
                20             25             30
Tyr Tyr Asn Lys Glu Asn Ser Pro Asp Lys Gly Leu Ala Glu Ile Ile
                35             40             45
Ile Gly Lys His Arg Gly Gly Pro Thr Gly Ser Cys Lys Leu Lys Phe
 50             55             60
Phe Gly Glu Tyr Thr Arg Phe Asp Asn Leu Ala His Asn Ser Val Gly
65             70             75             80
Ser Phe Glu

```

<210> 361

<211> 453

<212> DNA

<213> Homo sapiens

<400> 361

```

gctttgcagg aggaaatctc tatctctggc tgcaagatga ggctgagcta cctgagcagc
60
cggacccttg gctacaaatc tgtcctgagg atcagcctca cccacccgac catcccccctc
120
aacctcatga aggtgcacct catggtagcg gtggagggcc gcctcttcag gaagtggttc
180
gctgcagccc cagacctgtc ctattatttc atttgggaca agacagacgt ctacaaccag
240
aaggtgtttg ggctttcaga agcctttgtt tccgtgggtt atgaatatga atcctgccca
300
gatctaatacc tgtgggaaaa aagaacaaca gtgctgcagg gctatgaaat tgacgcgtcc
360
aagcttgtag gatggagcct agacaaacat catgcctcca acattcaaag tggcatcctg
420
cacaaagggg atggngagaa ccagtttgtg tct
453

```

<210> 362

<211> 151

<212> PRT

<213> Homo sapiens

<400> 362

```

Ala Leu Gln Glu Glu Ile Ser Ile Ser Gly Cys Lys Met Arg Leu Ser
 1             5             10             15
Tyr Leu Ser Ser Arg Thr Pro Gly Tyr Lys Ser Val Leu Arg Ile Ser
                20             25             30
Leu Thr His Pro Thr Ile Pro Phe Asn Leu Met Lys Val His Leu Met
 35             40             45
Val Ala Val Glu Gly Arg Leu Phe Arg Lys Trp Phe Ala Ala Ala Pro
 50             55             60
Asp Leu Ser Tyr Tyr Phe Ile Trp Asp Lys Thr Asp Val Tyr Asn Gln

```

```

65          70          75          80
Lys Val Phe Gly Leu Ser Glu Ala Phe Val Ser Val Gly Tyr Glu Tyr
      85          90          95
Glu Ser Cys Pro Asp Leu Ile Leu Trp Glu Lys Arg Thr Thr Val Leu
      100          105          110
Gln Gly Tyr Glu Ile Asp Ala Ser Lys Leu Gly Gly Trp Ser Leu Asp
      115          120          125
Lys His His Ala Leu Asn Ile Gln Ser Gly Ile Leu His Lys Gly Asn
      130          135          140
Gly Glu Asn Gln Phe Val Ser
145          150

```

<210> 363

<211> 502

<212> DNA

<213> Homo sapiens

<400> 363

```

ggcaccacaaa aagtttgcca cagtattcac actccaggtc tccataaacc ttccagatcc
60
gctcacacaaa gctgggtgttc atttgcttct tctgtaaact gttcaggacc ttcatgaaaag
120
cggtgatgcc tgaccgggtgc tcagggggcag ctttgcaaga gtcaggctga tgrtgatgg
180
tgtccccacc accagctact ggaggggagga ggtctgaggc ctgagctggg ttgacctga
240
gacacctgct gggatctggg tcaccagctg aaagcacagc catgttctgc cttccccta
300
gggggctctg ggcgccatgg ctttctgat ctgacccagc actctggggc ttggacagca
360
gtagtgtgat cacttcacct tgcgtctgga ctgagcttct gtgctgcatg tctgggggct
420
cttcaggagc agcatgagcc tctgcggagg aggtatcatt ttcaacaaa aaatcatctg
480
aaaccacctc ttgagaatgc ag
502

```

<210> 364

<211> 136

<212> PRT

<213> Homo sapiens

<400> 364

```

Met Gln His Arg Ser Val Gln Thr Gln Gly Glu Val Ile Thr Leu
1          5          10          15
Leu Leu Ser Lys Ala Gln Ser Ala Gly Ser Asp Gln Glu Ser His Gly
      20          25          30
Ala Gln Ser Pro Leu Gly Glu Gly Gln Asn Met Ala Val Leu Ser Ala
      35          40          45
Gly Asp Pro Asp Pro Ser Arg Cys Leu Arg Ser Asn Pro Ala Glu Ala
      50          55          60
Ser Asp Leu Leu Pro Pro Val Ala Gly Gly Gly Asp Thr Ile Thr His
65          70          75          80
Gln Pro Asp Ser Cys Lys Ala Ala Pro Glu His Arg Ser Gly Ile Thr

```

```

      85              90              95
Ala Phe Met Lys Val Leu Asn Ser Leu Gln Lys Lys Gln Met Asn Thr
      100              105              110
Ser Leu Cys Glu Arg Ile Trp Lys Val Tyr Gly Asp Leu Glu Cys Glu
      115              120              125
Tyr Cys Gly Lys Leu Phe Trp Tyr
      130              135

<210> 365
<211> 333
<212> DNA
<213> Homo sapiens

<400> 365
atctcaacgg atgcattccat caaggagatg atccccccag gtgctcttgt tatgctcaca
60
ccactgatcg ttgggattct atttgggggt gagaccctct ctggagtcct tgetgggtgcc
120
cttgtctctg gtgttcagat tgccatttct gcatccaaca ctgggtggtgc ctgggacaac
180
gccaaagaat acattgagcg tggagtttca gagcatgccca ggacccttgg cccaaaagggt
240
tttgaccctc acaaggcgcg tgtcattggt gacaccattg gagatcctct caaggacacg
300
tctggccctt ccctcaacat cctcatcaag ctt
333

<210> 366
<211> 111
<212> FRT
<213> Homo sapiens

<400> 366
Ile Ser Thr Asp Ala Ser Ile Lys Glu Met Ile Pro Pro Gly Ala Leu
1      5      10      15
Val Met Leu Thr Pro Leu Ile Val Gly Ile Leu Phe Gly Val Glu Thr
20      25      30
Leu Ser Gly Val Leu Ala Gly Ala Leu Val Ser Gly Val Gln Ile Ala
35      40      45
Ile Ser Ala Ser Asn Thr Gly Gly Ala Trp Asp Asn Ala Lys Lys Tyr
50      55      60
Ile Glu Ala Gly Val Ser Glu His Ala Arg Thr Leu Gly Pro Lys Gly
65      70      75      80
Ser Asp Pro His Lys Ala Ala Val Ile Gly Asp Thr Ile Gly Asp Pro
85      90      95
Leu Lys Asp Thr Ser Gly Pro Ser Leu Asn Ile Leu Ile Lys Leu
100      105      110

<210> 367
<211> 381
<212> DNA
<213> Homo sapiens

<400> 367

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gcgttcgtcg cactaccgg cgccggcgga acccttgacg agctactoga agcatggaca
 60
 tggcagcagc tcgggtgtaca cagcaaaccc gtngcccttg tacgactoga cnnctcttgg
 120
 gcaccgctga ccgcgctact caaccacatg accatcgaaa gcttcattcg cctcgaggac
 180
 cgcgcctcgc tcgtgatcgc cgataccata catcagctga tggccgatct tgaggggatgg
 240
 accccaccac caccgaagtg gcgctcgtga catagaacaa atgattctga ctatggctca
 300
 ttgacatctg cgcagcggct actagctcca ttgacttcaa atcgggcctt ggccgaggct
 360
 cngttcaggt ggcccggaat g
 381

<210> 368

<211> 89

<212> PRT

<213> Homo sapiens

<400> 368

Ala	Phe	Val	Ala	Leu	Pro	Gly	Gly	Gly	Gly	Thr	Leu	Asp	Glu	Leu	Leu
1				5					10				15		
Glu	Ala	Trp	Thr	Trp	Gln	Gln	Leu	Gly	Val	His	Ser	Lys	Pro	Val	Xaa
		20					25					30			
Leu	Val	Arg	Leu	Asp	Xaa	Phe	Trp	Ala	Pro	Leu	Thr	Ala	Leu	Leu	Asn
		35					40				45				
His	Met	Thr	Ile	Glu	Ser	Phe	Ile	Arg	Pro	Glu	Asp	Arg	Ala	Ser	Leu
	50					55				60					
Val	Ile	Ala	Asp	Thr	Ile	His	Gln	Leu	Met	Ala	Asp	Leu	Glu	Gly	Trp
65					70				75				80		
Thr	Pro	Pro	Pro	Pro	Lys	Trp	Arg	Ser							
					85										

<210> 369

<211> 313

<212> DNA

<213> Homo sapiens

<400> 369

gatacatgat cctctcatac cgcacacaca ccgtccccc ctgcgcgaat tcgcagacaa
 60
 acctgcgcag gcttcacagc aagccgtcaa ggctgcttcc tgtgggctac cgatagtctc
 120
 gtacgcgagt tctcggacat caacgcacaac gtcgggcaag atactgtcaa cgccatctac
 180
 acattctacg agcagcaagc gaccagtttc cttcgccagc tgaacgacct cccaccggaa
 240
 gagcttcccg acgtcatcga ggactttctc cgcctgtcca ctgatgtctc tctttaccat
 300
 ttccagcaag ctt
 313

<210> 370

```

<211> 101
<212> PRT
<213> Homo sapiens

<400> 370
Ser Ser His Thr Ala His Thr Pro Leu Pro Ser Ala Ala Ile Arg Arg
 1             5             10             15
Gln Thr Cys Ala Gly Phe Thr Ala Ser Arg Gln Gly Cys Phe Leu Trp
 20             25             30
Ala Thr Asp Ser Leu Val Arg Glu Phe Ser Asp Ile Asn Ala Asn Val
 35             40             45
Gly Gln Asp Thr Val Asn Ala Ile Tyr Thr Phe Tyr Glu Gln Gln Ala
 50             55             60
Thr Ser Phe Leu Arg Gln Leu Asn Asp Leu Pro Glu Glu Leu Pro
 65             70             75             80
Asp Val Ile Glu Asp Phe Phe Arg Leu Ser Thr Asp Val Leu Leu Tyr
 85             90             95
His Phe Gln Gln Ala
 100

<210> 371
<211> 380
<212> DNA
<213> Homo sapiens

<400> 371
atgacgggtc acgtcatcct ggcgattcca caggctgggtga cgtcatggat cggcctcatc
 60
tgcatcgcca ttggcacggg ctttatcaag cgaacacctt ccacgggtggt aggaggtctt
 120
tacgatgacg gtgacccccg ccgcatcag ggttctctgt acttctacat gtcatcagt
 180
attggatctc tcttcgcgcc gatcgtcacc ggctctctca aggaccatta cggtaccac
 240
gtaggtttca ttgccgctgc tatcggtatg gctctgggtc tgatcgctt cttccagggt
 300
cgttccaaac tgcgtgagct cgctctcgac atccccaatc cgctggcccc cggcgagggt
 360
cgccggatgg tgctccgcgg
 380

<210> 372
<211> 126
<212> PRT
<213> Homo sapiens

<400> 372
Met Thr Gly His Val Ile Leu Ala Ile Pro Gln Val Val Thr Ser Trp
 1             5             10             15
Ile Gly Leu Ile Cys Ile Ala Ile Gly Thr Gly Phe Ile Lys Pro Asn
 20             25             30
Leu Ser Thr Val Val Gly Gly Leu Tyr Asp Asp Gly Asp Pro Arg Arg
 35             40             45
Asp Gln Gly Phe Leu Tyr Phe Tyr Met Ser Ile Ser Ile Gly Ser Leu

```

```

      50              55              60
Phe Ala Pro Ile Val Thr Gly Leu Leu Lys Asp His Tyr Gly Tyr His
65              70              75              80
Val Gly Phe Ile Ala Ala Ile Gly Met Ala Leu Gly Leu Ile Ala
      85              90              95
Phe Phe His Gly Arg Ser Lys Leu Arg Glu Leu Ala Phe Asp Ile Pro
100              105              110
Asn Pro Leu Ala Pro Gly Glu Gly Arg Arg Met Val Leu Arg
115              120              125

<210> 373
<211> 475
<212> DNA
<213> Homo sapiens

<400> 373
acatgttgga aaaattgcct cccactctgg tgctacaggt atgaatctca gccacagtga
60
tgactgtggc agctacaggc ctgatgaaca cccaccaag aaaaggagca tcatgtgcct
120
gcttctctct ggttctctaaa tcctttggcc aaacatttct cccacaacct tccattccag
180
ttggctgggc actgcctctc agaaagaagt cccaggctcc tgtcagcccc agagcgccctg
240
catggactct gcccaactgtc cettctcaac acggaggccc ccaattctgt ggacccttac
300
acctacctct gtaccaccac atccccatgc ctgctccaga cagcactaac ctccccatgac
360
agtgggacca aagcagttct taaaggtcca atccactcag ttcttaaatg aaaaacagtt
420
gcccatgagt cccccccaaa gacgtccgca catatgccaa acattcggtg tgcac
475

<210> 374
<211> 109
<212> PRT
<213> Homo sapiens

<400> 374
Met Gly Met Trp Trp Tyr Arg Val Gly Cys Arg Gly Pro Gln Asn Trp
1      5      10      15
Gly Pro Pro Cys Trp Lys Gly Thr Val Gly Arg Val His Ala Gly Ala
20      25      30
Leu Gly Leu Thr Gly Thr Trp Asp Phe Phe Leu Arg Gly Ser Asp Gln
35      40      45
Pro Thr Gly Val Glu Gly Cys Gly Glu Asn Val Trp Pro Lys Asp Leu
50      55      60
Gly Thr Arg Glu Lys Gln Ala His Asp Ala Pro Phe Leu Gly Gly Val
65      70      75      80
Phe Ile Arg Pro Val Ala Ala Thr Val Ile Thr Val Ala Glu Ile His
85      90      95
Thr Cys Ser Thr Arg Val Gly Gly Asn Phe Ser Asn Met
100      105

```

<210> 375
 <211> 332
 <212> DNA
 <213> Homo sapiens

<400> 375
 nnacgcgtcg cctccacctc gaaacccgcc ggcggtcggt ttttcacocat ggccgaccgc
 60
 aaggcccaag ttgcgacggt caccgacacg ctgtatttca cgcgctcgca atgggatgga
 120
 tgcattggcac ggatgcgtgg ggataagata tcagcactga agtggaatca gatgcagatg
 180
 gcggcatgct ccttcatagc gccagtgggg gcgaagctgg gctgcccgca gcgcactatg
 240
 ggcacggcgc agctgctgta ccagcgtttc catctatttc atgcgccgac tgagttttcg
 300
 ttacatgagg tggcctttgac gtgtctcttc ac
 332

<210> 376
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 376
 Xaa Arg Val Ala Ser Thr Ser Lys Pro Ala Gly Gly Arg Phe Phe Thr
 1 5 10 15
 Met Ala Asp Arg Lys Ala Gln Val Ala Thr Val Thr Asp Thr Leu Tyr
 20 25 30
 Phe Thr Pro Ser Gln Trp Asp Gly Cys Met Ala Arg Met Arg Gly Asp
 35 40 45
 Lys Ile Ser Ala Leu Lys Trp Asn Gln Met Gln Met Ala Ala Cys Ser
 50 55 60
 Phe Ile Ala Ala Val Gly Ala Lys Leu Gly Cys Pro Gln Arg Thr Met
 65 70 75 80
 Gly Thr Ala Gln Leu Leu Tyr Gln Arg Phe His Leu Phe His Ala Pro
 85 90 95
 Thr Glu Phe Ser Leu His Glu Val Ala Leu Thr Cys Leu Phe
 100 105 110

<210> 377
 <211> 369
 <212> DNA
 <213> Homo sapiens

<400> 377
 cgcgtgccag gatatgtcaac tgatctgtcg gatattttccg aggttgagta ccgtcaactg
 60
 aggcctggaac gagggtgtct gtgttcgggtg tggactcagg gaactgccgc agacgccgag
 120
 aacgctatgg cggagctgaa agcccttgct gaaacggcgg gatctcagg actcgaagct
 180
 gtcattgcaac gtccgactac cccggatccg gcgacgtaca ttggttcggg caaggtggct
 240

gagcttgcgc aggtggtgcg ggcactggt gccgatactg tcatttgtga cgggtgaactt
 300
 gacgcgcgtc agttgcgcaa cctcgaggat cgggtcaagn gcaaagttgt ggaccggctg
 360
 gtctgattc
 369

<210> 378
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 378
 Arg Val Pro Gly Met Ser Thr Asp Leu Ser Asp Ile Ser Glu Val Glu
 1 5 10 15
 Tyr Arg Gln Leu Arg Leu Glu Arg Val Val Leu Cys Ser Val Trp Thr
 20 25 30
 Gln Gly Thr Ala Ala Asp Ala Glu Asn Ala Met Ala Glu Leu Lys Ala
 35 40 45
 Leu Ala Glu Thr Ala Gly Ser Gln Val Leu Glu Ala Val Met Gln Arg
 50 55 60
 Arg Thr Thr Pro Asp Pro Ala Thr Tyr Ile Gly Ser Gly Lys Val Ala
 65 70 75 80
 Glu Leu Ala Glu Val Val Arg Ala Thr Gly Ala Asp Thr Val Ile Cys
 85 90 95
 Asp Gly Glu Leu Asp Ala Ala Gln Leu Arg Asn Leu Glu Asp Arg Val
 100 105 110
 Lys Xaa Lys Val Val Asp Arg Ser Val
 115 120

<210> 379
 <211> 408
 <212> DNA
 <213> Homo sapiens

<400> 379
 acgcgttact taaacttacc tgtaataaat aaattcatta ttcttagttg gttaggtact
 60
 atgggctgtg gtttaccagg tgctatggca gctaaaattg cttatccaaa ccgtcaagca
 120
 gtagctatca caggcgacgg tgcgttccaa atggtaatgc aagactttgc tacagctgtt
 180
 caatataact taccaatgac aatctttgta ttaataaaca aacaattgtc attcattaaa
 240
 tatgaacaac aagctgctgg tgaattagag tatgccattg atttctctga tatggatcat
 300
 gctaaatttg ctgaagctgc tgggtggtaaa ggctatgttg tgagagatgt aagtcgttct
 360
 gacgacatcg ttgaagagge aatgggtcaa gatgttccaa caatcgtt
 408

<210> 380
 <211> 136
 <212> PRT

<213> Homo sapiens

<400> 380

```

Thr Arg Tyr Leu Asn Leu Ser Val Asn Asn Lys Phe Ile Ile Ser Ser
 1           5           10           15
Trp Leu Gly Thr Met Gly Cys Gly Leu Pro Gly Ala Met Ala Ala Lys
      20           25           30
Ile Ala Tyr Pro Asn Arg Gln Ala Val Ala Ile Thr Gly Asp Gly Ala
      35           40           45
Phe Gln Met Val Met Gln Asp Phe Ala Thr Ala Val Gln Tyr Asn Leu
      50           55           60
Pro Met Thr Ile Phe Val Leu Asn Asn Lys Gln Leu Ser Phe Ile Lys
      65           70           75           80
Tyr Glu Gln Gln Ala Ala Gly Glu Leu Glu Tyr Ala Ile Asp Phe Ser
      85           90           95
Asp Met Asp His Ala Lys Phe Ala Glu Ala Ala Gly Gly Lys Gly Tyr
      100          105          110
Val Val Arg Asp Val Ser Arg Leu Asp Asp Ile Val Glu Glu Ala Met
      115          120          125
Ala Gln Asp Val Pro Thr Ile Val
      130          135

```

<210> 381

<211> 613

<212> DNA

<213> Homo sapiens

<400> 381

```

naccgcgtcat aggcggggccc agtggaagac caccgcaaca cagttgggtg agatccgcgt
60
tgaggggcaag gtcctgcgcg tcccgcgaaa tctgggtcaag gcctaccact ctggggtgat
120
cgacgtcgcag gactgaaccc tgggagcctg ggcgggtccag catgactgct caggctcatt
180
accaaaacgc gtcgatcccc tagggttgtc gtcgatgaca agcccgaagt gaccctgccc
240
gattccgccc cogacgacct cgctggttag gacatcacca tcggcgacgg ccctgaagcg
300
tcgcgtgcga acctcgtcga agtgacttac gtcggcggtg ccttaagcaa tggctcgtgag
360
ttcgattcct cctggaaccg cggggagccg ctgaccttcc aactaggggc tggccaggtg
420
atccccgagt gggatgaagg tgtccaaggt atgaaggctg gtggcgcgac caaacctgtc
480
atccccccacc accttgctta cggtcgcaaa ggaatctcgg gtgtgatcgc tggcgggtgag
540
acgctggtct tcgtctgcga ccttgctaac atcatctgac gtgacccccg ctcaagcagt
600
cttcgcgccc ggg
613

```

<210> 382

<211> 137

<212> PRT

<213> Homo sapiens

<400> 382

Leu Leu Arg Leu Ile Thr Lys Thr Arg Arg Ser Arg Arg Val Val Val
 1 5 10 15
 Met Ser Lys Pro Glu Val Thr Leu Pro Asp Ser Ala Pro Asp Asp Leu
 20 25 30
 Val Val Glu Asp Ile Thr Ile Gly Asp Gly Pro Glu Ala Ser Ala Gly
 35 40 45
 Asn Leu Val Glu Val His Tyr Val Gly Val Ala Leu Ser Asn Gly Arg
 50 55 60
 Glu Phe Asp Ser Ser Trp Asn Arg Gly Glu Pro Leu Thr Phe Gln Leu
 65 70 75 80
 Gly Ala Gly Gln Val Ile Pro Glu Trp Asp Glu Gly Val Gln Gly Met
 85 90 95
 Lys Val Gly Gly Arg Arg Lys Leu Val Ile Pro His His Leu Ala Tyr
 100 105 110
 Gly Pro Gln Gly Ile Ser Gly Val Ile Ala Gly Gly Glu Thr Leu Val
 115 120 125
 Phe Val Cys Asp Leu Val Asn Ile Ile
 130 135

<210> 383

<211> 352

<212> DNA

<213> Homo sapiens

<400> 383

nggagcaaca cctggctcctt gggaatgaag tgtaggagtt gcatttgctg aggttgggtg
 60
 ttgccaaga gatgccagct tcttcgaact actgctgtgc aactcttcat gttcaaaacc
 120
 cagttttctg tttttcacac ctgaacatac acccccctgc agttgggttg ctcccccggt
 180
 accagctggg ctctatctac agagagagca atggcttccc ttcccttgaa ggaagtctca
 240
 ccctcacaag gacacttgat ccgctgcaaa gcagaaagtg tgcggaccct ttgggaaggg
 300
 cgttcttttc ttgttttagaa cctaggattc tgtttttccc aaacaggatc an
 352

<210> 384

<211> 93

<212> FRT

<213> Homo sapiens

<400> 384

Met Pro Ala Ser Ser Asn Tyr Cys Cys Ala Thr Leu His Val Gln Asn
 1 5 10 15
 Pro Val Phe Cys Phe Ser His Leu Asn Ile His Pro Pro Ala Val Gly
 20 25 30
 Trp Leu Pro Arg Tyr Gln Leu Gly Ser Ile Tyr Arg Glu Ser Asn Gly
 35 40 45
 Phe Pro Ser Leu Glu Gly Ser Leu Thr Leu Thr Arg Thr Leu Asp Pro

```

      50              55              60
Leu Gln Ser Arg Lys Cys Ala Asp Pro Leu Gly Arg Ala Phe Phe Ser
65              70              75              80
Cys Leu Glu Pro Arg Ile Leu Phe Phe Pro Asn Arg Ile
      85              90

```

<210> 385
 <211> 342
 <212> DNA
 <213> Homo sapiens

```

<400> 385
gccggcgcca cgaaatgcaa aatgcgcctt tcaccggagc ccaggttgat cgagccgcca
60
gcacctcggg caatgtcctg ggcttgactg gcacacgcaa tcaaagcgag caacaacaca
120
caaaaacgca tcatgaggca gacgccaggg aagtgcagca agccgcagca ggccgcggcg
180
gattggaaat atcggtgagg ctaatgggtc ccagcgcttg caggttgat tcggtggcca
240
attcgcggaa cgacagcacc gccagttcca gctcgccgag cagcaccagg cgacgaagc
300
tgccggcgcaa ctccgggtgc accaacaaca ccgactgtt ca
342

```

<210> 386
 <211> 109
 <212> FRT
 <213> Homo sapiens

```

<400> 386
Met Gln Asn Ala Pro Phe Thr Gly Arg Gln Val Asp Arg Ala Ala Ser
1      5      10      15
Thr Ser Gly Asn Val Leu Gly Leu Thr Gly Thr Arg Asn Gln Ser Glu
      20      25      30
Gln Gln His Thr Lys Thr His His Glu Ala Asp Ala Arg Glu Val Thr
      35      40      45
Glu Ala Ala Ala Gly Ala Arg Arg Leu Glu Ile Ser Val Arg Leu Met
      50      55      60
Val Thr Ser Ala Cys Arg Leu Tyr Ser Val Ala Asn Ser Arg Asn Asp
65      70      75      80
Ser Thr Ala Ser Ser Ser Pro Arg Ser Thr Arg Arg Arg Lys Leu
      85      90      95
Arg Arg Asn Ser Gly Cys Thr Asn Asn Thr Ala Leu Phe
      100      105

```

<210> 387
 <211> 379
 <212> DNA
 <213> Homo sapiens

```

<400> 387
acgctgtgac gcgcggcatc ggaagcgttg actgcagaga agaccgcgca cgtggctgtg
60

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ggacgtgctg gcacgtctga catgggtgcgt ggacccgcct tctcttcgcc tgcgcgatgcc
 120
 atgcaagagg agcttgacaa tgtgcgtgat ctgcgccatg cgcggcagca agcgcctcgat
 180
 gctgttcgtt ccgagctgct cgaagcgcag caagcatgtg cctcgtgccca gctgcagctg
 240
 cagcatgtgc cagatgatcg tgtgcgagcg catcccatat accaggcgct ccattgcggac
 300
 gttgcttaca tgcagcaaga acttgatcac gtacgagacg cattggcttc ggcaaatct
 360
 gagaatgcga gcctgcgcg
 379

<210> 388

<211> 114

<212> PRT

<213> Homo sapiens

<400> 388

Met	Arg	Leu	Val	Arg	Asp	Gln	Val	Leu	Ala	Ala	Cys	Lys	Gln	Arg	Pro
1			5						10				15		
His	Gly	Ala	Pro	Gly	Ile	Trp	Asp	Ala	Leu	Ala	His	Asp	His	Leu	Ala
		20					25					30			
His	Ala	Ala	Ala	Ala	Gly	Thr	Arg	His	Met	Leu	Ala	Ala	Leu	Arg	
	35					40				45					
Ala	Ala	Arg	Asn	Glu	Gln	His	Arg	Ala	Leu	Ala	Ala	His	Gly	Arg	
	50				55				60						
Asp	His	Ala	His	Cys	Gln	Ala	Pro	Leu	Ala	Trp	His	Ala	Gln	Ala	Lys
65			70						75				80		
Arg	Arg	Arg	Val	His	Ala	Pro	Cys	Gln	Thr	Cys	Gln	His	Val	Pro	Gln
			85					90				95			
Pro	Arg	Ala	Arg	Ser	Ser	Leu	Gln	Ser	Thr	Leu	Pro	Met	Pro	Ala	Arg
		100					105					110			
His	Ala														

<210> 389

<211> 382

<212> DNA

<213> Homo sapiens

<400> 389

ngatggcga ctgtcccaact gtacgtacgc gaagctcgcc gtgcagtcgg tccacgtccg
 60
 ggccctccac gtgtccgca accctccgaa gcgatgacct ggcccggggg cggaacagag
 120
 gtatttgcgtt tggagacgct tgggggtcaat tacggccagg tgccgcgcgt cgatgccctg
 180
 acgaccaccg tagagcgcgg caccatcacc tgccctcatgg gtcgaaatgg atcagggaag
 240
 tctctcttga tgtgggggat ccaaggggca acaaagtcct cagggaaggt actgggtcaac
 300
 cagcagggtt cttgggctga cccccgaaa gccgacgcg cgaccgctcg acgaatgggtg
 360

agcttagtcc cgcagtcagc cn
382

<210> 390

<211> 127

<212> PRT

<213> Homo sapiens

<400> 390

Xaa	Trp	Pro	Thr	Val	Pro	Leu	Ser	Val	Arg	Glu	Ala	Arg	Arg	Arg	Val
1				5					10				15		
Gly	Pro	Arg	Pro	Gly	Leu	Pro	Arg	Ala	Pro	Gln	Pro	Ser	Glu	Ala	Met
			20					25					30		
Thr	Trp	Pro	Gly	Gly	Gly	Asn	Glu	Val	Leu	Arg	Leu	Glu	Thr	Leu	Gly
			35				40					45			
Val	Asn	Tyr	Gly	Gln	Val	Arg	Ala	Val	Asp	Ala	Leu	Thr	Thr	Thr	Val
	50					55				60					
Glu	Arg	Gly	Thr	Ile	Thr	Cys	Leu	Met	Gly	Arg	Asn	Gly	Ser	Gly	Lys
	65				70					75					80
Ser	Ser	Leu	Met	Trp	Ala	Ile	Gln	Gly	Ala	Thr	Lys	Ser	Ser	Gly	Arg
			85						90					95	
Val	Leu	Val	Asn	His	Glu	Gly	Ser	Trp	Ala	Asp	Pro	Arg	Lys	Ala	Asp
			100					105					110		
Ala	Ala	Thr	Ala	Arg	Arg	Met	Val	Ser	Leu	Val	Pro	Gln	Ser	Ala	
			115				120						125		

<210> 391

<211> 456

<212> DNA

<213> Homo sapiens

<400> 391

nnacgcgttg ccgctctgtg aggcgcctat caccggtgaca ctctcgggtgc tatgagcgtg
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tgccgacctta tcggtggcat gcacgccttg ttccagcgact ctattccccc gcagatcttc
120
ctgcgcgcgc cctcctctct togcgcgcga cgaggccgac gtggagacgt ggtgcagcga
180
ggccgatgaa tcttggaacac ccacgcgcgc gacctggcgc ggatcattgt cgagcccatc
240
ttgcaaggag ccggaggcat gtggcgtgtg tctcgtctct gtctgaagca cctgcgcgtg
300
cgtgctgatg aacttgacct agttcttctc gcgcgcgagg tcgctactgg atttggggcg
360
actggcaaac ttttcgcatg cgagtgggcc gatatcgttc ctgacatcat ggtggtgtgg
420
aaatccatga ctggcgata cctgaccag tcggcc
456

<210> 392

<211> 55

<212> PRT

<213> Homo sapiens

<400> 392

Gly Ala Tyr His Gly Asp Thr Leu Gly Ala Met Ser Val Cys Asp Pro
 1 5 10 15
 Ile Gly Gly Met His Ala Xaa Phe Ser Asp Ser Ile Pro Gln Ile
 20 25 30
 Phe Leu Pro Ala Pro Ser Phe Phe Arg Arg Arg Arg Gly Arg Arg Gly
 35 40 45
 Asp Val Val Gln Arg Gly Arg
 50 55

<210> 393

<211> 371

<212> DNA

<213> Homo sapiens

<400> 393

nacgcgttgc togtcattgg tggctactcg gcctacgaag gtatctacac catgatgact
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 gagcggggacc ggtaccgggc ttcccgattt cgcacgggtgt gcatcccggc ttctatcgac
 120
 aacaaacctcc ccggttcgga actgtccatc ggcaccgaca ccgctctcaa cgtcatcgtc
 180
 gagggcgatgg acaagattaa ggagtcgggt atcgcggtcca gacgctgctt cgtcgtcgag
 240
 acgatgggtc gtgactgcgg ataccctcgc ttgatgtcgg gtatcgcgagc tggcgctgag
 300
 cggatctata ccaacgagga cggatatctc ctggacgacg tagccaacga cgtccattgg
 360
 ttgcggggagt c
 371

<210> 394

<211> 123

<212> PRT

<213> Homo sapiens

<400> 394

Xaa Ala Leu Leu Val Ile Gly Gly Tyr Ser Ala Tyr Glu Gly Ile Tyr
 1 5 10 15
 Thr Met Met Thr Glu Arg Asp Arg Tyr Pro Ala Phe Arg Ile Pro Thr
 20 25 30
 Val Cys Ile Pro Ala Ser Ile Asp Asn Asn Leu Pro Gly Ser Glu Leu
 35 40 45
 Ser Ile Gly Thr Asp Thr Ala Leu Asn Val Ile Val Glu Ala Met Asp
 50 55 60
 Lys Ile Lys Glu Ser Gly Ile Ala Ser Arg Arg Cys Phe Val Val Glu
 65 70 75 80
 Thr Met Gly Arg Asp Cys Gly Tyr Leu Ala Leu Met Ser Gly Ile Ala
 85 90 95
 Ala Gly Ala Glu Arg Ile Tyr Thr Asn Glu Asp Gly Ile Ser Leu Asp
 100 105 110
 Asp Leu Ala Asn Asp Val His Trp Leu Arg Glu
 115 120

<210> 395
 <211> 351
 <212> DNA
 <213> Homo sapiens

<400> 395
 gaattctagt tgggagattc atgaccaga cttttggaat aaacactagt catcatgcta
 60
 gcgacagggt gtcttgtgca tggtagaaag gcagtcgaag cctatgtctc tgaacctgac
 120
 tctcatttct gttttctact ttaacgattta tggtatctca tactccccat gttgcctgtt
 180
 ctccagtttt tttacttgtg ttatttccat tcttctattc ctgctcaatt tctgcctcag
 240
 ggcagaattg tgtccaacag ctcttaaatg cagcgcagaa actgtgatgt taaaacatc
 300
 ttgttatccg gccccaaaac atgttgtcct tggtaactct tactgggttg t
 351

<210> 396
 <211> 90
 <212> PRT
 <213> Homo sapiens

<400> 396
 Met Val Glu Arg Gln Ser Lys Pro Met Ser Leu Lys Pro Ala Leu Ile
 1 5 10 15
 Ser Val Phe Tyr Phe Thr Ile Tyr Val Ile Ser Tyr Ser Pro Cys Cys
 20 25 30
 Leu Phe Ser Ser Phe Phe Thr Cys Val Ile Ser Ile Leu Leu Phe Leu
 35 40 45
 Leu Asn Phe Cys Leu Arg Ala Glu Leu Cys Pro Thr Ala Leu Lys Cys
 50 55 60
 Ser Ala Glu Thr Val Met Leu Lys Thr Ser Cys Tyr Pro Ala Pro Lys
 65 70 75 80
 His Val Val Leu Gly Asn Ser Tyr Trp Phe
 85 90

<210> 397
 <211> 483
 <212> DNA
 <213> Homo sapiens

<400> 397
 gccgtcatta aagagatcac cctctcctc caacctggtg atgtcctcgt cgacgggtggt
 60
 aatgcttatt ttggtgatac ccgccgccgt gaggaggaaa tacgtccacc cggcattcac
 120
 tatgttggtta ctggcatctc cgggtggggga gtcggggccc tgaagggtccc atcaattatg
 180
 cctggcgggg ttaaggaatc ttacgaaatc atcggaccgg tcttagaaaa aatctccgcc
 240
 cagctcgacg gtgaaccctg ctgcgcatgg atgggtactg acggcgccgg acacttcgtc
 300

aagatggtcc ataatggcat cgagtagcgc gatatgcagt tcattggcga ggccgccctc
 360
 ctttttgcgn tgcccgccgg ttgaccaat gctgaggcgc ccgatgcott cgagtgtgg
 420
 aaccatggcg acctcaatc ctacctcgc gaaatcactt ctcggtact gcgtgccaa
 480
 gat
 483

<210> 398

<211> 161

<212> PRT

<213> Homo sapiens

<400> 398

Ala Val Ile Lys Glu Ile Thr Pro Leu Leu Gln Pro Gly Asp Val Leu
 1 5 10 15
 Val Asp Gly Gly Asn Ala Tyr Phe Gly Asp Thr Arg Arg Arg Glu Glu
 20 25 30
 Glu Ile Arg Pro Thr Gly Ile His Tyr Val Gly Thr Gly Ile Ser Gly
 35 40 45
 Gly Gly Val Gly Ala Leu Arg Val Pro Ser Ile Met Pro Gly Gly Val
 50 55 60
 Lys Glu Ser Tyr Glu Ile Ile Gly Pro Val Leu Glu Lys Ile Ser Ala
 65 70 75 80
 His Val Asp Gly Glu Pro Cys Cys Ala Trp Met Gly Thr Asp Gly Ala
 85 90 95
 Gly His Phe Val Lys Met Val His Asn Gly Ile Glu Tyr Ala Asp Met
 100 105 110
 Gln Phe Ile Gly Glu Ala Pro Phe Leu Phe Ala Xaa Pro Ala Gly Leu
 115 120 125
 Thr Asn Ala Glu Ala Ala Asp Ala Phe Glu Ser Trp Asn His Gly Asp
 130 135 140
 Leu Asn Ser Tyr Leu Val Glu Ile Thr Ser Arg Val Leu Arg Ala Lys
 145 150 155 160
 Asp

<210> 399

<211> 314

<212> DNA

<213> Homo sapiens

<400> 399

nngggaatga agaccaccca gcccttcctt tcctcaaatc ttctccaggc ttctgtgcac
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 ggcctcacc cccatccact cattcaccca tctatccatc cactcatcca cccatccagt
 120
 cattcactca tttgtccatc cactcatgta cccatccact cattcgccca tttatccatc
 180
 cactcaacca tccactcatc caccoatcca nctcatcatc cgtccagtca cccatetacc
 240
 caccatgta tccatccact catccaccca tccactcatc tgtccatcca cttatccacc
 300

catctactca ccca
314

<210> 400
<211> 104
<212> PRT
<213> Homo sapiens

<400> 400
Xaa Gly Met Lys Thr Thr Gln Pro Phe Leu Ser Ser Asn Leu Leu Gln
1 5 10 15
Ala Ser Val His Gly Ser Ser Thr His Pro Leu Ile His Pro Ser Ile
20 25 30
His Pro Leu Ile His Pro Ser Ser His Ser Leu Ile Cys Pro Ser Thr
35 40 45
His Val Pro Ile His Ser Phe Ala His Leu Ser Ile His Ser Thr Ile
50 55 60
His Ser Ser Thr His Pro Xaa His His Pro Ser Ser His Pro Ser Ile
65 70 75 80
His Pro Cys Ile His Pro Leu Ile His Pro Ser Thr His Leu Ser Ile
85 90 95
His Leu Ser Thr His Leu Leu Thr
100

<210> 401
<211> 2165
<212> DNA
<213> Homo sapiens

<400> 401
gagaaaaatgg aactacctgt atataaatta ggtgagcaaa cagtgataca ggtagtttta
60
agaagcaaat atatacagtc aatttaacag tgtttacttc tctggattgt ttaatgggtgt
120
caaaaatgaaa gatctattga agtttacta tacattgcat tgattgaacc ttggagagtt
180
ttatgaaaaa gaggggcac ccttgccatc tgtttccag tcttccttgc cccttccttt
240
gaaatgcctg cctctttttt gccagattg tttcctgacc atccgaactc agatggggtc
300
ctctaagtgc tctcctgata ttcacaaatc ccttcacaag gccacagtgc gaagtgaatg
360
atctggaggt gcctgggcat ctgtgttgga agggagtcaa gactcaccag ccagtcagtt
420
tgtgggtac agttgtccca caaaaatcag gcatgttac ctcccctctg ggcccctaca
480
gctgggactg atcatagcct cagattagaa gaaatactga cttctaactc tataagccag
540
cactcctggg taaggagtga agctctgttg gccatgccgc ttgggactgc tgggcagagc
600
tgagcctaca gttttgtact ggggtgcacg gatgacagct gggaagatgg aaaggcagct
660
tgaggattta tagcagctaa agggtaaatg ctgttatgca aaaggctccc atatgaactt
720

cctaCagggtg tagccgcagc caagtgtctg tacagctgct gagaatttgt cggtagtga
780
aaaattcctc tttgcatcac aagcgagtgg aaagccaggg gctgcattgag tggagaaagc
840
acagttctgt ttttcaagta ctgcagagaa tgagaatacc cagccgggag cctggagttg
900
aggcccgagt tacacaggct cccggaatac agacctggga agatagggga ggagagggga
960
agcttgtggc cttttgatcc gcccccgaa tgcccacgtt gcgtgtcttt gctgccttca
1020
tctctgtctc agaggccttc tcttccag agacctctt ggatgggtct aaggagagaca
1080
ctgccgggc ctttttcct gcaatcaca ggccaaatc ctccaggctg cgcttgatgc
1140
gcccgcgcgc cccaatgttc tacgggtctc ttttcgggtg caggattggg tggaccatgc
1200
cttccatctt cctgaaatcc tccagtctca catggtgagg ttttctgat cttgaaagcg
1260
attcagggtg ttttttaggg cctgacatgg tcatgggtga taccgacag gctttggggg
1320
gacagtctcg actctggctg cctaagacct ggaactggga gatgcctttg ctctcctggg
1380
gcctgtggt ggaatgagcc aggcccgga ccttgcggg aggtttgtgc gggttcttgg
1440
gaaggctcag atctgtaggg tgatcatccg taggggcttc tgctgccgc gactttttgt
1500
cttgCagggtg cagggaagtg agataattta catggagctt ttcttggtgt ctgtgggaag
1560
gaaaagaact gttttccgat tccctgtaca tgtccctgga agggatattg gatgtctgtt
1620
cattatgaag atgggtgctg gtgtgtctgt agaggctatg gagatgaggg gacgagtaga
1680
agtacgccag gaagctaggc atgtgggaat gggggagggc cctttctctc aagagttat
1740
ccttgccctc ctgaattttc tgettcagga cgtaggagtc agcaaggggg ttaagtgat
1800
gcttgagaa gctgcagcgg tggggatctg atcgactcag tttctcatgc ttaaataggt
1860
cattgatggt ctttctctct tccagggtc tgctttgaa actctggacg tgctgaatca
1920
ctgatggccg gctgaccgcc atatgggtcag tgctttggcc atgggtgggtc tgggacaaac
1980
tggaacacaa gtcaccccta gcaatcagtt tctttttgct gatcaaaagg ggtggggagc
2040
cataagggta gctgctggag aggtctggccc cactcacttg ggacaaaagc ttttcttgg
2100
ccagtgggga catcatgcct ggggtgcccc tagagtagag caggggcgtg taattaagtc
2160
catgg
2165

<210> 402

<211> 87

<212> PRT

<213> Homo sapiens

<400> 402

Glu Tyr Pro Ala Gly Ser Leu Glu Leu Arg Pro Glu Leu His Arg Leu
 1 5 10 15
 Pro Glu Tyr Arg Pro Gly Lys Ile Gly Glu Glu Arg Gly Ser Leu Trp
 20 25 30
 Pro Phe Asp Pro Pro Pro Glu Cys Pro Pro Cys Ala Ala Leu Leu Pro
 35 40 45
 Ser Ser Pro Ala Gln Arg Pro Ser Pro Ser Gln Arg Pro Pro Trp Met
 50 55 60
 Gly Leu Arg Glu Thr Leu Pro Gly Pro Phe Ser Leu Gln Ser Gln Gly
 65 70 75 80
 Pro Asn Pro Pro Gly Cys Ala
 85

<210> 403

<211> 369

<212> DNA

<213> Homo sapiens

<400> 403

cccatgggtg tgtcccagga cggcgctcatg aagcgctcagg taaatgacaa ggaacgggtc
 60
 gcgcacttgt tcgaatacac gacgcaagtg tctgtcgact cgacgccgca actcgctccag
 120
 ccttcgceca cgtcgcacga caacctcgtg cctgtccaga tgatcttttg ctccaagcag
 180
 cgcaacgcga aaaagatcaa tagccaccgc tgggtatttc atgcactggg ccgcatgcta
 240
 cagccccgaca tggtcgtctt ggtggacgtc ggcacgaagc ccggccacct cgccctatac
 300
 catctatggc aggcattcta tcaccgacct accttgggag gtgcttgccg gcgaattcat
 360
 gctatgatc
 369

<210> 404

<211> 123

<212> PRT

<213> Homo sapiens

<400> 404

Pro Met Gly Val Ser Gln Asp Gly Val Met Lys Arg Gln Val Asn Asp
 1 5 10 15
 Lys Glu Thr Val Ala His Leu Phe Glu Tyr Thr Thr Gln Val Ser Val
 20 25 30
 Asp Ser Thr Pro Gln Leu Val Gln Pro Ser Pro Thr Ser His Asp Asn
 35 40 45
 Leu Val Pro Val Gln Met Ile Phe Cys Phe Lys Gln Arg Asn Ala Lys
 50 55 60
 Lys Ile Asn Ser His Arg Trp Val Phe His Ala Leu Gly Arg Met Leu
 65 70 75 80
 Gln Pro Asp Met Val Val Leu Val Asp Val Gly Thr Lys Pro Gly His

85 90 95

Leu Ala Leu Tyr His Leu Trp Gln Ala Phe Tyr His Arg Pro Thr Leu
 100 105 110

Gly Gly Ala Cys Gly Glu Ile His Ala Met Ile
 115 120

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<210> 405
<211> 840
<212> DNA
<213> Homo sapiens
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400> 405
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ctgcgcgcctt ggaccacgagc ggcctctgcg gagacagtggt tggaggagag cgaccccaag
120
ccggcctctca gcaagatgaa tgggtccatcg gacaaaaagt catcgacgct cagtgaggagc
180
gtggaggccca ccgtgcccact gctgcagcgg accaagtctac ggatcgagca ggggtatcgtg
240
gagcgcctcag agacggggcgt gctggacaaag aaggaggggg agcaagccaa ggcgcgtgtt
300
gagaagggtga agaagttccg gaccctatgtg gaggaggggg acatttgtta ccgcctctac
360
atgcgggcaga ccatcatcaa ggtgatcaag ttcatctctc tcatctgcta accgctctac
420
tactgtcaca acatcaagtt cgacgtggac tgcaccgttg acattgagag ctgcagggcg
480
taccgcacct accgctgtgc ccaccacctg gccacactct tcaagatctc ggcgctcttc
540
taccatcagcc tagtcatctt ctacggcctc atctgcatgt atacactgtg ttggatgcta
600
cggcgctccc tcaagaagta ctcgtttgag tcgatccgtg agggagagca ctacagcgac
660
atccccgacg tcaagaacga ctctgccttc atgtgcacc tcattgacca atacgaccgc
720
ctctactcca agcgcttcgc gctcttcctg tcggaggtga gtgagaacaa gctgcggcag
780
ctgaacctca acaacgagtg gacgctggac aagctccggg acggagagaa gacaacgcgt
840

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<210> 406
<211> 91
<212> PRT
<213> Homo sapiens
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400> 406															
Leu	Ile	Cys	Met	Tyr	Thr	Leu	Trp	Trp	Met	Leu	Arg	Arg	Ser	Leu	Lys
				5					10					15	
Lys	Tyr	Ser	Phe	Glu	Ser	Ile	Arg	Glu	Glu	Leu	Ser	Ser	Tyr	Ser	Asp
			20					25						30	
Pro	Asp	Val	Lys	Asn	Asp	Phe	Ala	Phe	Met	Leu	His	Leu	Ile	Asp	Gln
		35					40					45			
Tvr	Asp	Pro	Leu	Tyr	Ser	Lys	Arg	Phe	Ala	Val	Phe	Leu	Ser	Glu	Val

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      50              55              60
Ser Glu Asn Lys Leu Arg Gln Leu Asn Leu Asn Glu Trp Thr Leu
65              70              75              80
Asp Lys Leu Arg Tyr Gly Glu Lys Thr Thr Arg
      85              90

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<210> 407
 <211> 535
 <212> DNA
 <213> Homo sapiens

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<400> 407
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aggctctact ttgctctgcc tggcttcagg gtgtagggga tggagagctg gaattccagg
120
ctgcttcttg gctgtctagg gccaggggc tcgggacaca gagctctctg aggccgagca
180
caagccttgg gcagaggtga gccagagctc tgactgttcc attcgactac gttgccaagg
240
agatgctcgc tcggagtggt tgctctggct ctgggattcc aaaccaagct gccttctctg
300
atgtggcctt agtgctctgg gcgatgtac cttggctctg cctggaccct ctctctcttc
360
caggcctctg tcccaccagg atgatgccta tccagagctc attgtctctt cccattctct
420
ccccgagctt cccattccgt gtctctctgg agggcccatc atcatctctg tggaggtggt
480
gcactgagga ccacagcagc cctcgcatc ccacgggcaa aggggtatgt gtagg
535

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<210> 408
 <211> 97
 <212> PRT
 <213> Homo sapiens

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<400> 408
Met Leu Ala Arg Ser Gly Cys Ser Gly Ser Gly Ile Pro Asn Gln Ala
1              5              10              15
Ala Phe Ser Asp Val Ala Leu Val Leu Trp Ala Asp Val Pro Trp Leu
20              25              30
Cys Leu Asp Pro Leu Ser Leu Pro Gly Leu Cys Pro Thr Arg Met Met
35              40              45
Pro Ile Gln Ser Ser Leu Ser Ser Pro Thr Ser Ser Pro Ser Phe Pro
50              55              60
Phe Arg Val Ser Leu Glu Gly Pro Ser Ser Ser Trp Trp Arg Cys Cys
65              70              75              80
Thr Glu Asp His Ser Ser Pro Arg Ile Pro Thr Gly Lys Gly Val Cys
85              90              95
Val

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<210> 409
 <211> 375

<212> DNA

<213> Homo sapiens

<400> 409

ngtgtcatgg gtgtctatac cagcgatgag gccaaagactg ccaagacttt tgggtattgg
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 ggacttcgga ttacgactaa tatttctctt gccacaact tcaatatgga tgaatttct
 120
 gatattgtct tccgtgtcaa tgataccagt ttgacaccaa ctgtgggacc agaattagct
 180
 agaaaattga cggaaattgc tggctctcag caaggggagt atcagggtgc agatgcgact
 240
 gcagccttcc aagaagtgc acaattgttc ggctttataa ctacgattat tagtgccatt
 300
 gcaggaattt ccctttttgt tggagggact ggtgttatga acatcatgct ggtttcggtg
 360
 acggagcgta cgcgt
 375

<210> 410

<211> 125

<212> PRT

<213> Homo sapiens

<400> 410

Xaa	Val	Met	Gly	Val	Tyr	Thr	Ser	Asp	Glu	Ala	Lys	Thr	Ala	Lys	Thr
1			5						10				15		
Phe	Gly	Ile	Gly	Gly	Leu	Pro	Ile	Thr	Thr	Asn	Ile	Ser	Leu	Ala	Asn
		20						25					30		
Asn	Phe	Asn	Met	Asp	Glu	Ile	Ser	Asp	Ile	Val	Phe	Arg	Val	Asn	Asp
		35				40						45			
Thr	Ser	Leu	Thr	Pro	Thr	Val	Gly	Pro	Glu	Leu	Ala	Arg	Lys	Leu	Thr
	50				55						60				
Glu	Ile	Ala	Gly	Leu	Gln	Gln	Gly	Glu	Tyr	Gln	Val	Ser	Asp	Ala	Thr
	65				70				75					80	
Ala	Ala	Phe	Gln	Glu	Val	Gln	Gln	Leu	Phe	Gly	Phe	Ile	Thr	Thr	Ile
			85					90				95			
Ile	Ser	Ala	Ile	Ala	Gly	Ile	Ser	Leu	Phe	Val	Gly	Gly	Thr	Gly	Val
		100					105					110			
Met	Asn	Ile	Met	Leu	Val	Ser	Val	Thr	Glu	Arg	Thr	Arg			
		115					120					125			

<210> 411

<211> 409

<212> DNA

<213> Homo sapiens

<400> 411

ccacatactt caccctcctc accccctcca cctactccac cacctggcag tcgccatcga
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 ggatgggacg caactccacg tccacatgct ccggaccacg cggcgtgtgg tggatgtgca
 120
 gcacgcggtc gggggccctt gagctcgaag gcgcggcgca tcgggcagtg ctgcgcggcc
 180

tggctgcagg gcacgtcgta ctggtgagag acgcggaagc acttgtagcc gatgtaggcg
 240
 cgatcggctg tcccgaaactg gcgctgatag gccgtgtaca caacacaaac tgttgtactc
 300
 ccggtccacc acgatcatgg gctggggactc gtgttccagg tggggggcca gggcttgggc
 360
 ctgcggtgag cgcgtggggg gatggggca tagcgtcggt gaggaggtg
 409

<210> 412
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 412
 Met Pro His Pro Pro His Ala Leu Thr Ala Gly Pro Ser Pro Gly Pro
 1 5 10 15
 Pro Pro Gly Thr Arg Val Pro Ala His Asp Arg Gly Gly Pro Gly Val
 20 25 30
 Gln Gln Phe Val Leu Cys Thr Arg Pro Ile Ser Ala Ser Ser Gly Gln
 35 40 45
 Pro Ile Ala Pro Thr Ser Ala Thr Ser Ala Ser Ala Ser Arg Thr Ser
 50 55 60
 Thr Thr Cys Pro Ala Thr Arg Pro Ala Ser Thr Ala Arg Cys Ala Ala
 65 70 75 80
 Pro Ser Ser Ser Arg Gly Pro Asp Arg Val Leu His Ile His His Thr
 85 90 95
 Pro Arg Gly Pro Glu His Val Asp Val Glu Leu Arg Pro Ile Leu Asp
 100 105 110
 Gly Asp Cys Gln Val Val Glu
 115

<210> 413
 <211> 357
 <212> DNA
 <213> Homo sapiens

<400> 413
 ccgggcatcc caccaccggg tgtcatgaac caagtagtgg ccctatggt agggactcca
 60
 gcaccgggtg gaagtccata tggacaacag gtgggagttt tggggcctcc agggcagcag
 120
 gcaccacctc catatcccg gccacatcca gctggacccc ctgtcataca gcagccaaca
 180
 acaccatgt ttgtagctcc cccccaaag acccagcggc ttcttctactc agaggcctac
 240
 ctgaaatata ttgaaggact cagtgcggag tccaacagca ttagcaagtg ggcacagaca
 300
 ctggcagctc ggagacgcga cgtccatttg tcgaaagaac aggagagccg cctacc
 357

<210> 414
 <211> 119
 <212> PRT

<213> Homo sapiens

<400> 414

```

Pro Gly Ile Pro Pro Gly Val Met Asn Gln Val Val Ala Pro Met
 1           5           10           15
Val Gly Thr Pro Ala Pro Gly Gly Ser Pro Tyr Gly Gln Gln Val Gly
 20           25           30
Val Leu Gly Pro Pro Gly Gln Gln Ala Pro Pro Pro Tyr Pro Gly Pro
 35           40           45
His Pro Ala Gly Pro Pro Val Ile Gln Gln Pro Thr Thr Pro Met Phe
 50           55           60
Val Ala Pro Pro Pro Lys Thr Gln Arg Leu Leu His Ser Glu Ala Tyr
 65           70           75           80
Leu Lys Tyr Ile Glu Gly Leu Ser Ala Glu Ser Asn Ser Ile Ser Lys
 85           90           95
Trp Asp Gln Thr Leu Ala Ala Arg Arg Asp Val His Leu Ser Lys
100           105           110
Glu Gln Glu Ser Arg Leu Pro
115

```

<210> 415

<211> 332

<212> DNA

<213> Homo sapiens

<400> 415

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tctagagcca acttggttat cgtaatgaat agagagacta catctatata aattattacg
60
ctctatagta atcatgaagc ttgggttata tgtatgacaa aaattgcaga aaaatcgaaa
120
caagaatatg gcgacttact aaaagaaaaa gaccatttac aagatatgga acagcttgag
180
atgactatcg tctcgatcca tacgccgtat ccgtccattg tcagaattca aggaaaaaatc
240
aacacattac agccagagct ttggcaagct cccaatttag caattcgggt aattgtgagc
300
aatccgccag agggacaacc catctcacgc gt
332

```

<210> 416

<211> 102

<212> PRT

<213> Homo sapiens

<400> 416

```

Met Asn Arg Glu Thr Thr Ser Ile Ser Ile Ile Thr Leu Tyr Ser Asn
 1           5           10           15
His Glu Ala Trp Val Ile Cys Met Thr Lys Ile Ala Glu Lys Ser Lys
 20           25           30
Gln Glu Tyr Gly Asp Leu Leu Lys Glu Lys Asp His Leu Gln Asp Met
 35           40           45
Glu Gln Leu Glu Met Thr Ile Val Ser Ile His Thr Pro Tyr Pro Ser
 50           55           60
Ile Val Arg Ile Gln Gly Lys Ile Asn Thr Leu Gln Pro Glu Leu Trp

```

```

65              70              75              80
Gln Ala Pro Asn Leu Ala Ile Arg Leu Ile Val Ser Asn Pro Pro Glu
              85              90              95
Gly Gln Pro Ile Ser Arg
              100

```

```

<210> 417
<211> 483
<212> DNA
<213> Homo sapiens

```

```

<400> 417
gaattctctcg ccgtctctga ggtgggagcg gacacctttg tgcgctccac cgagggagag
60
tacgcggcca acgtcgagge cgtggtgacc ccagcaccgg cggagaaaga tattgagggc
120
cagccagaag cacaggaaca tgacaccccg ggtacagaga ccattgagaa gctggtcgaa
180
tgggcccagg gcgcaggcat tactgtaaac cccgcgcttg ttgttatta taccctcaag
240
tgcgatgatg tcaagctcca ccacccggcc gcggagagcg aagagcgaga gtccgagttg
300
gcggcggttc tcattccttg cgatcgagag ctggatgaaa agcgccctta ggccgcactc
360
gagccggttg agtttgagtt ggcaggggat aaggactttg cagacaatga cttcctagtc
420
aagggctatg ttggcccgcg cgctttgaac gccaatggca tcaaggctct ggccgatcca
480
cgc
483

```

```

<210> 418
<211> 161
<212> PRT
<213> Homo sapiens

```

```

<400> 418
Glu Phe Leu Ala Val Ser Glu Val Gly Glu Asp Thr Phe Val Arg Ser
1          5          10          15
Thr Glu Gly Asp Tyr Ala Ala Asn Val Glu Ala Val Val Thr Pro Ala
20          25          30
Pro Ala Glu Lys Asp Ile Glu Gly Gln Pro Glu Ala Gln Glu His Asp
35          40          45
Thr Pro Gly Thr Glu Thr Ile Glu Lys Leu Val Glu Trp Ala Gln Gly
50          55          60
Ala Gly Ile Thr Val Asn Pro Arg Val Val Cys Tyr Tyr Thr Leu Lys
65          70          75          80
Cys Met Met Ile Lys Leu His His Pro Ala Ala Glu Ser Glu Glu Arg
85          90          95
Glu Ser Glu Leu Ala Ala Val Leu Ile Pro Gly Asp Arg Glu Leu Asp
100          105          110
Glu Lys Arg Leu Glu Ala Ala Leu Glu Pro Val Glu Phe Glu Leu Ala
115          120          125
Gly Asp Lys Asp Phe Ala Asp Asn Asp Phe Leu Val Lys Gly Tyr Val

```

```

      130              135              140
Gly Pro Arg Ala Leu Asn Ala Asn Gly Ile Lys Val Leu Ala Asp Pro
145              150              155              160
Arg

<210> 419
<211> 797
<212> DNA
<213> Homo sapiens

<400> 419
atttcacccc aggaaaacca gtaaggacca atgattaagc ccaaggttgg gtaccgagtt
60
cggatccata agtacccggcc gccccagggtg ctggaatttg ggctccccc ggtgaaaata
120
tccatgcagc cgcgttgtct taggtagaaa agggagactg ggggtgggtg ggctgagctc
180
aagccccctgc ctacatactt tagtagtaac gactcccgat ctgcatccaa cacatttacc
240
gaacttctag taagcgcgcc cgcctgcaag cgaaagcact ccctgccaa gaaacagatc
300
ttttccactt aaaattccca aactcagacc ttccactttt tactgaacaa aaagcgtgta
360
catgatctga aggggtgaca tgacattttc taaattgggc gaatcaggaa gagggtgatg
420
aaaatccttg acgttttctg gggataggac atttgtgtgt gataacgttc ttaagtcgaa
480
tttcagtgtg gcagtgcacg cagattcttc atttgtgtta gtgtatttcc atacggtatg
540
tattagtaca agaaatagtg ttccctttga cactcgaacc caaggagtgg tccgaggctt
600
tttgaggcaa cgtaggatca atgtctctga agcagatttg gtgaaggatg caggctctcat
660
aatttacaga gcaatcacag cttctcttga aacggagaaa ttagatteta tgaatttttg
720
tcagatgcaga tagatatgat gtggagaaac ggggaaaatt gagtacaaaa agatgaggct
780
tgaatgatgg ctggcca
797

<210> 420
<211> 106
<212> PRT
<213> Homo sapiens

<400> 420
Met Arg Pro Ala Ser Phe Thr Lys Ser Ala Ser Glu Thr Leu Ile Leu
1          5          10
Arg Cys Leu Lys Lys Pro Arg Thr Thr Pro Trp Val Arg Val Ser Lys
20          25          30
Gly Thr Leu Phe Leu Val Leu Ile His Thr Val Trp Lys Tyr Thr Asn
35          40          45
Thr Asn Glu Glu Ser Ala Cys Thr Ala Thr Leu Lys Phe Asp Leu Arg

```

```

      50              55              60
Thr Leu Ser His Thr Asn Val Leu Ser Pro Glu Asn Val Lys Asp Phe
65              70              75              80
His Gln Pro Leu Pro Asp Ser Pro Asn Leu Glu Asn Val Met Ser Thr
      85              90              95
Leu Gln Ile Met Tyr Thr Leu Phe Val Gln
      100              105

<210> 421
<211> 406
<212> DNA
<213> Homo sapiens

<400> 421
ggatccacca tgatggagcc caccaccca tcctcagtc accctgctgca gctttccat
60
aaccacaac aggtcaatct tgtctcccta aacacacacc gtgctctcat gctgccatgg
120
tttgccctggg gccctctctc cctcctctgc tttctggaga acccttgca ctcctccaag
180
ccttcaagtt gaaaagtga cagtcagcat atgtctctag ctcagccctt actgcgtgga
240
ttcatgaaga ttggttcact gtcagccctt gaccagaacg tgtgttttag gaaagcagga
300
accaatgtct accaatgtct gtagtcccag cctccaccct ggcatacagt aggtgtctcat
360
tgaatgtggg agggaaagag gagacacatg gaagggaatg tcattc
406

<210> 422
<211> 104
<212> PRT
<213> Homo sapiens

<400> 422
Met Met Glu Pro Thr His Pro Ser Ser Val His Leu Leu Gln Leu Leu
1      5      10      15
His Asn Pro Thr Gln Val Asn Leu Val Ser Leu Asn Thr Pro Cys Ala
20      25      30
Leu Met Leu Pro Trp Phe Ala Trp Gly Pro Leu Tyr Leu Leu Cys Phe
35      40      45
Leu Glu Asn Pro Cys Thr Pro Pro Lys Pro Ser Ser Trp Lys Val Asn
50      55      60
Ser Gln His Met Ser Leu Ala Gln Pro Leu Leu Arg Gly Phe Met Lys
65      70      75      80
Ile Gly Ser Leu Ser Ala Pro Asp Gln Asn Val Cys Phe Arg Lys Ala
85      90      95
Gly Thr Lys Ser Tyr Gln Cys Leu
100

<210> 423
<211> 628
<212> DNA
<213> Homo sapiens

```

<400> 423
 ngccacccta cgccctcgct gcaatggcaa cttcagatcc cgggtggcac cgtagtctta
 60
 gagccaccgg ttctgagcgg ggaggacgac ggggttgggg cggaggaagg agagggagaa
 120
 ggagatgggg atttgctgac gcagacccaa gcccacaacgc cgactccagc acccgcttgg
 180
 ccggcgcccc cagccacacc gcgcttctctg gccctcgcaa atggctccct gttggtgccc
 240
 ctctctgagt ccaaggaggc gggcgcttac acttgccgtg cacacaatga gctggggcgc
 300
 aactctacgt caatacgcgt ggcggtggca gcaaccgggc ccccaaaaca cgcgcctggc
 360
 gccgggggag aacccgacgg acaggccccc acctctgagc gcaagtcac agccaagggc
 420
 cggggcaaca gcgtctctgc ttccaaaccc gagggcaaaa tcaaaggcca aggcctggcc
 480
 aaggtcagca ttctcgggga gaccgagacg gagccggagg aggcacacaag tgagggagag
 540
 gaggccgaag accagatcct cgcggacccg gcggaggagc agcgctgtgg caacggggac
 600
 ccctctcggt acgtttctaa ccacgcgt
 628

<210> 424

<211> 209

<212> PRT

<213> Homo sapiens

<400> 424

Xaa	His	Pro	Thr	Pro	Arg	Leu	Gln	Trp	Gln	Leu	Gln	Ile	Pro	Gly	Gly
1				5				10					15		
Thr	Val	Val	Leu	Glu	Pro	Pro	Val	Leu	Ser	Gly	Glu	Asp	Asp	Gly	Val
			20					25					30		
Gly	Ala	Glu	Glu	Gly	Glu	Gly	Glu	Gly	Asp	Gly	Asp	Leu	Leu	Thr	Gln
			35				40					45			
Thr	Gln	Ala	Gln	Thr	Pro	Thr	Pro	Ala	Pro	Ala	Trp	Pro	Ala	Pro	Pro
			50				55				60				
Ala	Thr	Pro	Arg	Phe	Leu	Ala	Leu	Ala	Asn	Gly	Ser	Leu	Leu	Val	Pro
65				70					75					80	
Leu	Leu	Ser	Ala	Lys	Glu	Ala	Gly	Val	Tyr	Thr	Cys	Arg	Ala	His	Asn
			85					90						95	
Glu	Leu	Gly	Ala	Asn	Ser	Thr	Ser	Ile	Arg	Val	Ala	Val	Ala	Ala	Thr
			100					105					110		
Gly	Pro	Pro	Lys	His	Ala	Pro	Gly	Ala	Gly	Gly	Glu	Pro	Asp	Gly	Gln
			115				120					125			
Ala	Pro	Thr	Ser	Glu	Arg	Lys	Ser	Thr	Ala	Lys	Gly	Arg	Gly	Asn	Ser
			130				135					140			
Val	Leu	Pro	Ser	Lys	Pro	Glu	Gly	Lys	Ile	Lys	Gly	Gln	Gly	Leu	Ala
145				150					155					160	
Lys	Val	Ser	Ile	Leu	Gly	Glu	Thr	Glu	Thr	Glu	Pro	Glu	Glu	Asp	Thr
				165				170						175	
Ser	Glu	Gly	Glu	Glu	Ala	Glu	Asp	Gln	Ile	Leu	Ala	Asp	Pro	Ala	Glu

	180		185		190
Glu	Gln	Arg	Cys	Gly	Asn
				Gly	Asp
	195		200	Pro	Ser
				Arg	Tyr
				Val	Ser
				Asn	His
Ala				205	

<210> 425
 <211> 471
 <212> DNA
 <213> Homo sapiens

<400> 425
 ccggccgtcg aagactttga ggacgatgta gctgcagcgc cagcgttacg agccctggag
 60
 tacgtggatt tgacccagg cactnaagtg cgcgtcatcg ccattgacac cgtgttccta
 120
 ggatcgtgca cgaatggccg tgaggactta cggctggctg ctgaggttcc caaaggacga
 180
 catatcgtag cgggcacccg gatgctcgtc gccctgggat ctgctcgtgt ccgtctgcag
 240
 gctatggagg aaggcctcga cgagatcggt tccgggtttg ctgacatett tcgcaataac
 300
 tctgcgaaca atggcttgtt actggctcag gttgaccccg aggtcgtcga agagtgttgg
 360
 gactttgccc agcagcatcc tggtgagcag ctcaccgtct ccctcgagaa tcggacgacg
 420
 aaccttcggg gtgcgacgac ctaccgcttc catattgatg acgtcacgcg t
 471

<210> 426
 <211> 157
 <212> PRT
 <213> Homo sapiens

<400> 426
 Pro Ala Val Glu Asp Phe Glu Asp Asp Val Ala Arg Ser Ala Ala Leu
 1 5 10 15
 Arg Ala Leu Glu Tyr Val Asp Leu Thr Pro Gly Thr Xaa Val Arg Val
 20 25 30
 Ile Ala Ile Asp Thr Val Phe Leu Gly Ser Cys Thr Asn Gly Arg Glu
 35 40 45
 Asp Leu Arg Leu Ala Ala Glu Val Pro Lys Gly Arg His Ile Ala Ala
 50 55 60
 Gly Thr Arg Met Leu Val Ala Pro Gly Ser Ala Arg Val Arg Leu Gln
 65 70 75 80
 Ala Met Glu Glu Gly Leu Asp Glu Ile Gly Ser Arg Phe Ala Asp Ile
 85 90 95
 Phe Arg Asn Asn Ser Ala Asn Asn Gly Leu Leu Ala Gln Val Asp
 100 105 110
 Pro Glu Val Val Glu Glu Leu Trp Asp Phe Ala Glu Gln His Pro Gly
 115 120 125
 Glu Gln Leu Thr Val Ser Leu Glu Asn Arg Thr Ile Asn Leu Pro Gly
 130 135 140
 Arg Thr Thr Tyr Pro Phe His Ile Asp Asp Val Thr Arg

145

150

155

<210> 427

<211> 546

<212> DNA

<213> Homo sapiens

<400> 427

ctagcggtag tagaagggtat gcagtttgat cgcggctact tgtctcogta ttatcatcaac
 60
 aatcaagaaa caatgaatgc agagctagaa aacccattta ttcttcttgt tgataagaaa
 120
 atttctaata tccgtgactt gctaccaatt ttggaagggt ttgctaaagc atcgcgccca
 180
 ttgttgatca ttgcggaaga cgttgaaggc gaagcgttgg caaccttggg ttgtaacact
 240
 atgcgcggca tcgtaaaagt agcggcagcg aaagcggcgg gtttttgtga tcgcgctaaa
 300
 gcaatgcttc aagacattgc tgtgctaacy ggttcaactg ttatttcaga agaaattggc
 360
 attaagcttg aagaagcgac aattgaacag ttgggtacag cgaagcgcgt tacattgaca
 420
 aaagaaagta caacgattgt tgatggtgcg ggtgttgcag ctaattattac tggtctggtt
 480
 gagcaaattc gtgcagaaat tgctaactct tcttctggct acgataaaga gaaattgcaa
 540
 gaacgc
 546

<210> 428

<211> 182

<212> PRT

<213> Homo sapiens

<400> 428

Leu	Ala	Val	Val	Glu	Gly	Met	Gln	Phe	Asp	Arg	Gly	Tyr	Leu	Ser	Pro
1				5					10					15	
Tyr	Phe	Ile	Asn	Asn	Gln	Glu	Thr	Met	Asn	Ala	Glu	Leu	Glu	Asn	Pro
			20					25					30		
Phe	Ile	Leu	Leu	Val	Asp	Lys	Lys	Ile	Ser	Asn	Ile	Arg	Asp	Leu	Leu
		35				40						45			
Pro	Ile	Leu	Glu	Gly	Val	Ala	Lys	Ala	Ser	Arg	Pro	Leu	Leu	Ile	Ile
		50				55					60				
Ala	Glu	Asp	Val	Glu	Gly	Glu	Ala	Leu	Ala	Thr	Leu	Val	Val	Asn	Thr
65				70					75					80	
Met	Arg	Gly	Ile	Val	Lys	Val	Ala	Ala	Ala	Lys	Ala	Pro	Gly	Phe	Gly
			85						90					95	
Asp	Arg	Arg	Lys	Ala	Met	Leu	Gln	Asp	Ile	Ala	Val	Leu	Thr	Gly	Ser
			100					105					110		
Thr	Val	Ile	Ser	Glu	Glu	Ile	Gly	Ile	Lys	Leu	Glu	Glu	Ala	Thr	Ile
		115				120					125				
Glu	Gln	Leu	Gly	Thr	Ala	Lys	Arg	Val	Thr	Leu	Thr	Lys	Glu	Ser	Thr
130					135						140				
Thr	Ile	Val	Asp	Gly	Ala	Gly	Val	Ala	Ala	Asn	Ile	Thr	Gly	Arg	Val

<210> 431
 <211> 192
 <212> DNA
 <213> Homo sapiens

<400> 431
 ctacgcatcc accagcgtag acacacggga gagaggccct acactggcct cgggtgcaac
 60
 cgcgccttcc gccagcgac gccctctgac atccaccagc gcattcacac gggcgagaag
 120
 ccnaccgcgt gcccgactgc cgagcggcgc ttctcctcct cctctcgcct ggtcagtcac
 180
 cggcgtgtgc ac
 192

<210> 432
 <211> 64
 <212> PRT
 <213> Homo sapiens

<400> 432
 Leu Ala Ile His Gln Arg Thr His Thr Gly Glu Arg Pro Tyr Thr Gly
 1 5 10 15
 Leu Gly Cys Asn Arg Arg Phe Arg Gln Arg Thr Ala Leu Val Ile His
 20 25 30
 Gln Arg Ile His Thr Gly Glu Lys Pro Xaa Pro Cys Pro Asp Cys Glu
 35 40 45
 Arg Arg Phe Ser Ser Ser Ser Arg Leu Val Ser His Arg Arg Val His
 50 55 60

<210> 433
 <211> 635
 <212> DNA
 <213> Homo sapiens

<400> 433
 nmgccggcgg ctgcgttggg atacgacgac gctgcgattg ggcgtagta tctttggtac
 60
 ctcatggagg agcgtggcgc gtatgcggag gccgcgcgc tcatgccgct gctgctccgg
 120
 accgaccgag gcgcgtggga cagctttgtg tgctgctacc tcgagcggca ccaaagggaat
 180
 gcgatactcc cgcacattcc gacgcaggac ccccgactga gtgagatggt gtaacgatcc
 240
 gtgctggtgc atctgctgca gcacgatccc acgcagctgt tggcgacgct ccgcgcagtg
 300
 ccgagtcaca tctactcgaa gcaggcgggt gctgcggcga tcggcgatca cgcacgaacc
 360
 agccgcacgc tgctcgagtgc cctgcacag ctgtacatgg ccgcacatca gcccggaag
 420
 gctctgacat actacatgag cctgcgtgat ccattgcgtg ttgatctcat tcgcagtagc
 480
 gatctgctga tcgatgtgca gcaccacatc ggcacgctgc tcgagctcga tcagggaatgc
 540

gcgggctcca ctgagccgcg ctccagcgcg cttatgccgc tgctcgtgcc atataccac
 600
 tcgattccca tccagcgcg catggcgag ctcga
 635

<210> 434

<211> 211

<212> PRT

<213> Homo sapiens

<400> 434

Xaa Pro Ala Ala Ala Leu Gly Tyr Asp Val Ala Ala Ile Gly Arg Glu
 1 5 10 15
 Tyr Leu Trp Tyr Leu Met Glu Glu Arg Gly Ala Tyr Ala Glu Ala Ala
 20 25 30
 Ala Leu Met Pro Leu Leu Leu Arg Thr Asp Arg Gly Ala Trp Asp Thr
 35 40 45
 Phe Val Cys Cys Tyr Leu Glu Arg His Gln Arg Asp Ala Ile Leu Pro
 50 55 60
 His Ile Pro Thr Gln Asp Pro Gln Leu Ser Glu Met Val Tyr Asp Leu
 65 70 75 80
 Val Leu Val His Leu Leu Gln His Asp Pro Thr Gln Leu Leu Ala Thr
 85 90 95
 Leu Arg Ala Trp Pro Ser His Ile Tyr Ser Lys Gln Ala Val Ala Ala
 100 105 110
 Ala Ile Gly Asp His Ala Arg Thr Ser Arg Thr Leu Leu Glu Cys Leu
 115 120 125
 Ala Gln Leu Tyr Met Ala Ala His Gln Pro Gly Lys Ala Leu Thr Tyr
 130 135 140
 Tyr Met Arg Leu Arg Asp Pro Cys Val Phe Asp Leu Ile Arg Glu Tyr
 145 150 155 160
 Asp Leu Leu Ile Asp Val Gln His His Ile Gly Thr Leu Val Glu Leu
 165 170 175
 Asp Gln Glu Cys Ala Gly Ser Thr Glu Pro Arg Ser Ser Ala Leu Met
 180 185 190
 Pro Leu Leu Val Pro Tyr Thr His Ser Ile Pro Ile Gln Arg Ala Met
 195 200 205
 Ala Gln Leu
 210

<210> 435

<211> 493

<212> DNA

<213> Homo sapiens

<400> 435

nnogtacggt cgcgtatattt ccgcgcccg gaagctatcg ataataaagt tcaaccgctg
 60
 atccagcggt agcaatggcg ggcacaggaa gggtaacttag gcattgcagaa agaaaagctt
 120
 tccgctctga tggatgggtga atcggttcgac agcgagctgt tgagttctct gtgcgaagat
 180
 cgaacgcttc aacaaagctg gcagggtat cactgtatgc gtgacacact gcgaggtgat
 240

gtcgggcaag tgatgcattc cgacatcgcc gatcgctag ccgctgcact tgagaaagaa
 300
 cccgcccgcc tgggtgccttc cgcggttcag gaattctcagc cgcagcctca cacctggcag
 360
 aaaatgccgt tctgggacaa agtgcgtccc tgggcgagcc agattacgca aatcgggtatg
 420
 gcggcctcgc tgtcgtggc ggtgatcgtc ggcgtgcagc agtacaacca gccttctcgc
 480
 ccacgaacg cgt
 493

<210> 436
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 436
 Met Gln Lys Glu Lys Leu Ser Ala Leu Met Asp Gly Glu Ser Phe Asp
 1 5 10 15
 Ser Glu Leu Leu Ser Ser Leu Ser Gln Asp Arg Thr Leu Gln Gln Ser
 20 25 30
 Trp Gln Gly Tyr His Leu Ile Arg Asp Thr Leu Arg Gly Asp Val Gly
 35 40 45
 Gln Val Met His Leu Asp Ile Ala Asp Arg Val Ala Ala Ala Leu Glu
 50 55 60
 Lys Glu Pro Ala Arg Leu Val Pro Ser Ala Val Gln Glu Ser Gln Pro
 65 70 75 80
 Gln Pro His Thr Trp Gln Lys Met Pro Phe Trp Asp Lys Val Arg Pro
 85 90 95
 Trp Ala Ser Gln Ile Thr Gln Ile Gly Met Ala Ala Cys Val Ser Leu
 100 105 110
 Ala Val Ile Val Gly Val Gln Gln Tyr Asn Gln Pro Ser Ala Pro Ser
 115 120 125
 Asn Ala
 130

<210> 437
 <211> 447
 <212> DNA
 <213> Homo sapiens

<400> 437
 ntggtaaccg gtgtccctga tatggaccct gctgtgttag agcgtaaatt atttatttta
 60
 cgtaattatg taacacgcatt ctgtttggag tctgttaatg gaattaaagga caactttttac
 120
 attaatacat tctcatacaa aacaatcggt tataaaggct agttaaccac tgaacaagtg
 180
 ccacaatatt tcttagattt acaaaatcca agtatggtaa cggcattagc gcttgtttat
 240
 tcacgtttct caacaaatc atttcctcgt tggcgtttag cacaaccatt ccgttacatc
 300
 gctcataatg gcgaaatcaa tacggttcgc ggtaatatca attggatgaa agcacgtgaa
 360

gcggttacttg aagctgaatt ttctactcgc tcagaattag atatgttaat gccaatctgt
 420
 acggatggga tgtctgactc ggcaagg
 447

<210> 438

<211> 149

<212> PRT

<213> Homo sapiens

<400> 438

Xaa	Val	Thr	Gly	Val	Pro	Asp	Met	Asp	Pro	Ala	Val	Leu	Glu	Arg	Lys
1			5					10					15		
Leu	Phe	Ile	Leu	Arg	Asn	Tyr	Val	Thr	Arg	Ile	Cys	Leu	Glu	Ser	Val
			20					25					30		
Asn	Gly	Ile	Lys	Asp	Asn	Phe	Tyr	Ile	Asn	Thr	Phe	Ser	Tyr	Lys	Thr
			35				40				45				
Ile	Val	Tyr	Lys	Gly	Gln	Leu	Thr	Thr	Glu	Gln	Val	Pro	Gln	Tyr	Phe
			50			55					60				
Leu	Asp	Leu	Gln	Asn	Pro	Ser	Met	Val	Thr	Ala	Leu	Ala	Leu	Val	His
			65			70				75				80	
Ser	Arg	Phe	Ser	Thr	Asn	Thr	Phe	Pro	Arg	Trp	Arg	Leu	Ala	Gln	Pro
			85					90					95		
Phe	Arg	Tyr	Ile	Ala	His	Asn	Gly	Glu	Ile	Asn	Thr	Val	Arg	Gly	Asn
			100					105					110		
Ile	Asn	Trp	Met	Lys	Ala	Arg	Glu	Ala	Leu	Leu	Glu	Ala	Glu	Phe	Phe
			115				120						125		
Thr	Arg	Ser	Glu	Leu	Asp	Met	Leu	Met	Pro	Ile	Cys	Thr	Asp	Gly	Met
			130			135						140			
Ser	Asp	Ser	Ala	Arg											

<210> 439

<211> 395

<212> DNA

<213> Homo sapiens

<400> 439

nacgcgtgaa gggagagtgg ggccgagccc caggaggctg tctcgcagca gctgcaccag
 60
 cttcccagggt gccggctgga cctggccacg caaagcctga cggaggagac ctgcaggggc
 120
 ctggggcaag tgctgccgag ggagacgctg tgcacggagc tggctcgtg tgactgcagt
 180
 ctacgcgagg aagggggccac actgctgctc cgaggcctgt gtgccaacac cgtgctgcgc
 240
 tttctggact taaagggcaa caaccttcgg gctgcagggg ccgaggctct gggaaaactc
 300
 ctccaacaga acaagtccat tcagagcctc acgcttgagt ggaacagcct gggcacgtgg
 360
 gacgatgcct tcgccacett ctgcgggggc ctggc
 395

<210> 440

<211> 128

<212> PRT

<213> Homo sapiens

<400> 440

```

Arg Glu Ser Gly Ala Glu Pro Gln Glu Ala Val Leu Gln Gln Leu His
 1             5             10             15
Gln Leu Pro Arg Gly Arg Leu Asp Leu Ala Thr Gln Ser Leu Thr Val
 20             25             30
Glu Thr Cys Arg Ala Leu Gly Lys Leu Leu Pro Arg Glu Thr Leu Cys
 35             40             45
Thr Glu Leu Val Leu Ser Asp Cys Met Leu Ser Glu Glu Gly Ala Thr
 50             55             60
Leu Leu Leu Arg Gly Leu Cys Ala Asn Thr Val Leu Arg Phe Leu Asp
 65             70             75             80
Leu Lys Gly Asn Asn Leu Arg Ala Ala Gly Ala Glu Ala Leu Gly Lys
 85             90             95
Leu Leu Gln Gln Asn Lys Ser Ile Gln Ser Leu Thr Leu Glu Trp Asn
100            105            110
Ser Leu Gly Thr Trp Asp Asp Ala Phe Ala Thr Phe Cys Gly Gly Leu
115            120            125

```

<210> 441

<211> 364

<212> DNA

<213> Homo sapiens

<400> 441

```

gccagtgact acgtgaacat gttcgatgcc gagcaggggt ttttcgacag gcgcagcccg
60
ggcggcgagtg tccaagccgg cttggatccg gaatcctggg gcggtctgtt cactgagacc
120
gacgggttga acttcgcctt ccacgctcca caggacggcc gggggctggc cgcgctctac
180
ggcggtccga aaggcttga gaacaagctc gatgcctttt tcgcgacgcc ggaacacggc
240
gacaagccgg cgtacggcgg aatccacgaa atggctgagg ccagagcggt ccggtatgggc
300
caattgggga tgtccaacga gccctcgac catattccct acatctacaa ctatgccggc
360
gcgc
364

```

<210> 442

<211> 121

<212> PRT

<213> Homo sapiens

<400> 442

```

Ala Gln Tyr Tyr Val Asn Met Phe Asp Ala Glu Gln Gly Phe Phe Asp
 1             5             10             15
Arg Arg Ser Pro Gly Gly Glu Phe Gln Ala Gly Leu Asp Pro Glu Ser
 20             25             30
Trp Gly Gly Leu Phe Thr Glu Thr Asp Gly Trp Asn Phe Ala Phe His

```

```

      35              40              45
Ala Pro Gln Asp Gly Arg Gly Leu Ala Ala Leu Tyr Gly Gly Pro Lys
  50              55              60
Gly Leu Glu Asn Lys Leu Asp Ala Phe Phe Ala Thr Pro Glu Asn Ala
  65              70              75              80
Asp Lys Pro Ala Tyr Gly Gly Ile His Glu Met Val Glu Ala Arg Ala
      85              90              95
Val Arg Met Gly Gln Leu Gly Met Ser Asn Glu Pro Ser His His Ile
      100              105              110
Pro Tyr Ile Tyr Asn Tyr Ala Gly Ala
      115              120

```

<210> 443

<211> 430

<212> DNA

<213> Homo sapiens

<400> 443

```

accgggttacg gctcagtgca acaagagatg ttccccaaca acctcgtgctg gatgcgcgtg
  60
ctcatgggtgc tggcaatccc ctctgccaaag atcctctctga cgacctctgtc catcgggatcg
  120
ggcgggtccgg cgcgctcttc cgggccctggc atgggtcatcg gccgagccac tggcgcgggca
  180
ctgtggcgccc tcctcgaggg gctgccaggt atcccatcct caccgatgag ttctgtcatt
  240
gtcggcatga tcgacctgctt cgggtgcggtt gcccatgccc cactcggcgt gctgctcatg
  300
gttggcgaga tgaccggaaa cctgtcgtcg ctcgtctcctg gcctgatcgc cgctcgccgtc
  360
gctggccgag ttgtcgggga cacttcgata tacacctctc agctcaagga tcgcctggag
  420
ggcgacgcgt
  430

```

<210> 444

<211> 143

<212> PRT

<213> Homo sapiens

<400> 444

```

Thr Gly Tyr Gly Ser Val Gln Gln Glu Met Phe Ala Asn Asn Leu Val
  1              5              10              15
Arg Met Pro Leu Leu Met Val Leu Ala Ile Pro Phe Ala Lys Ile Leu
      20              25              30
Ser Thr Thr Leu Ser Ile Gly Ser Gly Gly Pro Ala Ala Ser Ser Gly
      35              40              45
Pro Gly Met Val Ile Gly Gly Ala Thr Gly Ala Ala Leu Trp Arg Leu
      50              55              60
Leu Glu Gly Leu Pro Gly Ile Pro Ser Ser Pro Met Ser Phe Val Ile
  65              70              75              80
Val Gly Met Ile Ala Cys Phe Gly Ala Val Ala His Ala Pro Leu Gly
      85              90              95
Val Leu Leu Met Val Gly Glu Met Thr Gly Asn Leu Ser Leu Leu Ala

```

```

          100              105              110
Pro Gly Met Ile Ala Val Ala Val Ala Gly Arg Val Val Gly Asp Thr
          115              120              125
Ser Ile Tyr Thr Ser Gln Leu Lys Asp Arg Leu Glu Gly Asp Ala
          130              135              140

```

<210> 445
 <211> 360
 <212> DNA
 <213> Homo sapiens

```

<400> 445
ccatggggcct gcctagcctc tggggaggcc cctcagctgg tgacaccagc agggcagatt
60
tcttgettta ttgctcacco tgtccagggt tccctctggt tgtgaggagg ctgctgccac
120
cttgggtcca ggaagcatga agctccgcag gtcagcctcc tgggtgggagg acctttcctt
180
agttttcttt gctcttctgc tctgagtcga gccctggctg gacctttgat cctctctctc
240
ttttacagga aattttctga ctttctcttt ttgccttttc aagatctgtg atgccatctc
300
caagtgggaa caagccatga aggagctgca ccccggaag tctgagggtg ggacacgcgt
360

```

<210> 446
 <211> 101
 <212> PRT
 <213> Homo sapiens

```

<400> 446
Met Ala Cys Ser His Leu Glu Met Ala Ser Gln Ile Leu Lys Arg Gln
1          5          10          15
Lys Lys Lys Val Arg Lys Phe Pro Asp Lys Glu Arg Arg Asp Gln Arg
20          25          30
Ser Ser Gln Gly Trp Thr Gln Ser Arg Arg Ala Lys Lys Thr Lys Glu
35          40          45
Lys Ser Ser His Gln Glu Ala Asp Leu Arg Ser Phe Met Leu Pro Gly
50          55          60
Pro Lys Val Ala Ala Ala Pro Ser Gln Thr Glu Gly Thr Leu Asp Arg
65          70          75          80
Val Ser Asn Lys Ala Arg Asn Leu Pro Cys Trp Cys His Gln Leu Arg
85          90          95
Gly Leu Pro Arg Gly
100

```

<210> 447
 <211> 487
 <212> DNA
 <213> Homo sapiens

```

<400> 447
acgcgtgaag ggggaaattg ctctgcccac ctgaggatta atcattaccc tggaaacctt
60

```

cccaaggcca tcaaggaaca cgcacccctt accagacctt ccagctgctg ggggctctcc
 120
 gagtgaggct gaggtcatgg agaaggggaat ggggggcccc catggccagc tggacctgat
 180
 cactgacctc ccaactcagcc acagccctca gggccctgtg ccagtccaga agccccattca
 240
 gggacacctt tggccaatgt tctgtttcat ctgcgaggca accttcccca gtgccccaac
 300
 catagcggtt tccccaaac accctcagga aggaggagacc actacctgtg cagggggggg
 360
 caggagcctc ctgagagcct catatgggga ggaagtggta ccatctcacc cccattgcct
 420
 ttctctccta ctccacactg gccagcttcc ctcaagtccc ctctgcctc agtgcacctt
 480
 cagcgct
 487

<210> 448

<211> 117

<212> PRT

<213> Homo sapiens

<400> 448

Met	Glu	Lys	Gly	Met	Gly	Gly	Pro	His	Gly	Gln	Leu	Asp	Leu	Ile	Thr
1				5					10					15	
Ala	Ser	Pro	Leu	Ser	His	Ser	Pro	Gln	Gly	Pro	Val	Pro	Val	Gln	Lys
			20					25					30		
Pro	Ile	Gln	Gly	His	Leu	Trp	Pro	Met	Phe	Cys	Phe	Ile	Cys	Glu	Ala
			35					40				45			
Thr	Phe	Pro	Ser	Ala	Pro	Thr	Ile	Ala	Phe	Ser	Pro	Lys	His	Pro	Gln
			50				55				60				
Glu	Gly	Gly	Thr	Thr	Thr	Cys	Ala	Gly	Gly	Ala	Arg	Ser	Leu	Leu	Arg
65					70				75					80	
Ala	Ser	Tyr	Gly	Glu	Glu	Val	Val	Pro	Ser	His	Pro	His	Cys	Leu	Ser
			85					90					95		
Leu	Leu	Leu	Pro	Pro	Gly	Gln	Leu	Pro	Ser	Val	Pro	Leu	Leu	Pro	Gln
			100				105					110			
Cys	Pro	Phe	Thr	Arg											
			115												

<210> 449

<211> 353

<212> DNA

<213> Homo sapiens

<400> 449

gagctcagcc agttggagtt tgagaagcgg cagctgcaca gggacttgga gcaggccaag
 60
 gagaaggggg agcgggcaga gaagctggag agggagctac agcgactcca ggaggagaac
 120
 gggaggcttg ccagggaaggt gacctccctg gagacagcca ccgagaaagt cgaggccctg
 180
 gagcatgaga gccagggcct gcagctggag aaccggactc tgaggaagtc tctggacacc
 240

ttgcagaacg tgtccctgca gcttgagggc ctggagcgtg acaacaagca gctggacgca
 300
 gagaacctgg agctgcgcag gctggtggag accatgcgga gacgacaacg cgt
 353

<210> 450

<211> 117

<212> PRT

<213> Homo sapiens

<400> 450

Glu	Leu	Ser	Gln	Leu	Glu	Phe	Glu	Lys	Arg	Gln	Leu	His	Arg	Asp	Leu
1			5						10				15		
Glu	Gln	Ala	Lys	Glu	Lys	Gly	Glu	Arg	Ala	Glu	Lys	Leu	Glu	Arg	Glu
		20						25				30			
Leu	Gln	Arg	Leu	Gln	Glu	Glu	Asn	Gly	Arg	Leu	Ala	Arg	Lys	Val	Thr
		35					40					45			
Ser	Leu	Glu	Thr	Ala	Thr	Glu	Lys	Val	Glu	Ala	Leu	Glu	His	Glu	Ser
		50				55					60				
Gln	Gly	Leu	Gln	Leu	Glu	Asn	Arg	Thr	Leu	Arg	Lys	Ser	Leu	Asp	Thr
		65				70				75				80	
Leu	Gln	Asn	Val	Ser	Leu	Gln	Leu	Glu	Gly	Leu	Glu	Arg	Asp	Asn	Lys
			85						90				95		
Gln	Leu	Asp	Ala	Glu	Asn	Leu	Glu	Leu	Arg	Arg	Leu	Val	Glu	Thr	Met
			100					105					110		
Arg	Arg	Arg	Gln	Arg											
			115												

<210> 451

<211> 444

<212> DNA

<213> Homo sapiens

<400> 451

gtgatgcggc tgactaagcc tactttatcc accaatatcc cagtaacatg tgaagagaaa
 60
 gacttacctg gagatctctt taaccagctg atgagagatg atccttcaac cggttaatggt
 120
 gcagaagttt taatgttggg agaaatgctg actttaccac agaattttgg gaatatattt
 180
 ttgggagaga ccttttccag ttatatcagc gttcataatg atagcaatca agttgtaaaa
 240
 gacataattag taaaagctga tcttcagaca agttctcagc gtttaaatct ttcagcctcc
 300
 aatgctgcag tggctgaact taaaccggat tgttgtattg atgatgtcat acatcatgaa
 360
 gtcaaagaaa ttggaacaca catcttggtg tgtgctgtga gttatacaac tcaggctgga
 420
 gaaaaaatgt atttcagaaa attt
 444

<210> 452

<211> 148

<212> PRT

<213> Homo sapiens

<400> 452

```

Val Met Arg Leu Thr Lys Pro Thr Leu Phe Thr Asn Ile Pro Val Thr
 1              5              10              15
Cys Glu Glu Lys Asp Leu Pro Gly Asp Leu Phe Asn Gln Leu Met Arg
      20              25              30
Asp Asp Pro Ser Thr Val Asn Gly Ala Glu Val Leu Met Leu Gly Glu
      35              40              45
Met Leu Thr Leu Pro Gln Asn Phe Gly Asn Ile Phe Leu Gly Glu Thr
      50              55              60
Phe Ser Ser Tyr Ile Ser Val His Asn Asp Ser Asn Gln Val Val Lys
65              70              75              80
Asp Ile Leu Val Lys Ala Asp Leu Gln Thr Ser Ser Gln Arg Leu Asn
      85              90              95
Leu Ser Ala Ser Asn Ala Ala Val Ala Glu Leu Lys Pro Asp Cys Cys
      100             105             110
Ile Asp Asp Val Ile His His Glu Val Lys Glu Ile Gly Thr His Ile
      115             120             125
Leu Val Cys Ala Val Ser Tyr Thr Thr Gln Ala Gly Glu Lys Met Tyr
      130             135             140
Phe Arg Lys Phe
145

```

<210> 453

<211> 373

<212> DNA

<213> Homo sapiens

<400> 453

```

gctagctctg accccacctt tgccaagtgg cactaggggtg gccaatgggg actagggttg
60
tataattgga aaatacagtc tcccctgttg tccaagaaag gcccagatg acctggggct
120
tgaaaggcac tcccgtctgg tgcttcctgg gaggaggtgg ggggcacggg ggcggcgggg
180
cctgtctgtg ctgagcatcc ccagctccag ggcaggtgct gggctctgag cccactgggt
240
gcgttttggg atgggctggc ctgcgcggct gtcgtttcag agcacacaga agagaccctg
300
ccacaggagg agtgggagga gaagctgttg atgttcctgc gagacacctt ggccatcatt
360
tctgacaacg cgt
373

```

<210> 454

<211> 108

<212> PRT

<213> Homo sapiens

<400> 454

```

Met Met Ala Arg Val Ser Arg Arg Asn Ile Asn Ser Phe Ser Ser His
 1              5              10              15
Ser Ser Cys Gly Arg Val Ser Ser Val Cys Ser Glu Thr Thr Ala Ala

```

```

                20                25                30
Gln Ala Ser Pro Ser Gln Asn Ala Pro Val Gly Leu Arg Ala Gln His
      35                40                45
Leu Pro Trp Ser Trp Gly Cys Ser Ala Gln Thr Gly Pro Ala Ala Pro
      50                55                60
Leu Pro Pro Thr Cys Ser Gln Glu Ala Pro Ser Gly Ser Ala Phe Gln
      65                70                75                80
Ala Pro Gly His Leu Gly Pro Phe Leu Asp Asn Arg Gly Asp Cys Ile
      85                90                95
Phe Gln Leu Tyr Asn Pro Ser Pro His Trp Pro Pro
      100                105

```

<210> 455

<211> 602

<212> DNA

<213> Homo sapiens

<400> 455

```

cctaggcaaa gcatgcccac cctacctccc cttaccctta cccttcattt tcccctaagc
60
accctatcacc accgatgtta ctgtatgtgt ttgcttacgc tgacagccca ccaccacac
120
tggaatgtcc gcacgacaaa ggcaggactc ttggctgcct tagccacagc tggatcccca
180
gagctttgta ggggtgttggg cacagagtgg agtgggtact taataagtat ctgtggaatg
240
aacatgtaca gagtgaagcc ctgtgcccag aacaggctca aaataagctc aattcctttc
300
cttgccactt actaagtccct ttttctctcg cccctctcca ctgacctggt tttgatgccca
360
gacagcacag atgggctagg gaggcagggt gggaagcaga gatctgcgtc tcttgagact
420
ggagctgggt ggtggggctc ctctctgggt ctgcgagggc tcattgggga ggtggcagcg
480
acccctcag gagcctctgt cgctgcact cagatctgtg cctttccaca gcgccggag
540
gaagacttgc tcaggagata aattcaaaga caacaggaag ctggacgttg tggctcacgc
600
gt
602

```

<210> 456

<211> 100

<212> PRT

<213> Homo sapiens

<400> 456

```

Met Pro Thr Leu Pro Pro Leu Thr Leu Thr Leu His Phe Pro Leu Ser
1                5                10                15
Thr His His His Arg Cys Tyr Cys Met Cys Leu Leu Thr Leu Thr Ala
      20                25                30
His His Pro His Trp Asn Val Arg Thr Thr Lys Ala Gly Leu Leu Ala
      35                40                45
Ala Leu Ala Thr Ala Gly Ser Pro Glu Leu Cys Arg Val Leu Gly Thr

```

```

      50              55              60
Glu Trp Ser Gly Tyr Leu Ile Ser Ile Cys Gly Met Asn Met Tyr Arg
65              70              75              80
Val Lys Pro Cys Ala Gln Asn Arg Leu Lys Ile Ser Ser Ile Pro Phe
      85              90              95
Leu Ala Thr Tyr
      100

<210> 457
<211> 324
<212> DNA
<213> Homo sapiens

<400> 457
acgcgtcatg tggatattcc tgggagggtc ccaggaacgt ttctggacgg gcccccgacc
60
agaggtcagg gaacttttct tattattctg cactgtccca gggatagtca aaccaggctc
120
tccccctctg ctggccgcaa caccgcagcc gccgccacga ccgcacgctg aattcatgac
180
ccgacacgcg acgtggcagc gagcacaccc accgctagga gaaagagcgc tcatcgaaga
240
tcgttttctg tccactggcc agcgccacta tgatcaggtg gggatatcgc ccggcgccgg
300
gagcaccggg acgccggggc gccg
324

<210> 458
<211> 105
<212> PRT
<213> Homo sapiens

<400> 458
Met Trp Ile Phe Leu Gly Gly Ser Gln Glu Arg Phe Trp Thr Gly Pro
1              5              10              15
Arg Pro Glu Val Arg Glu Leu Phe Leu Leu Phe Cys Thr Cys Pro Gly
      20              25              30
Ile Val Lys Pro Gly Leu Pro Leu Leu Leu Ala Ala Thr Arg Gln Pro
      35              40              45
Pro Pro Arg Pro His Ala Glu Phe Met Thr Arg His Ala Thr Trp Gln
      50              55              60
Arg Ala His Pro Pro Leu Gly Glu Arg Ala Leu Ile Glu Asp Arg Phe
      65              70              75              80
Leu Ser Thr Gly Gln Arg His Tyr Asp Gln Val Gly Tyr Pro Pro Gly
      85              90              95
Gly Gly Ser Thr Gly Thr Pro Gly Arg
      100              105

<210> 459
<211> 415
<212> DNA
<213> Homo sapiens

<400> 459

```

acgcgttcat tcggcatctg cttccatgga tttcctgcgg ggaggcgcgg ccgagagtgc
60
gggtgtcgaa cagcacactt cagtgatcgt ttcaaccacc ggccgagatg ggctcctgacg
120
ctgggcttca agccgcttgc gctcgcgctc ctgatctcgg gcagcgcgat tccgggtggtt
180
tatgtgcggc gcagacgact gcgcacgccc ctcacgaggt atctgcacat gcttaaaggg
240
agaggcctca cccgacagct gggcatcgga tttaacgaag ccacgacgaa tcttctctgc
300
ctctcctaaag ccgatcatcg gcatgccagg tttgtgggtg aatgcttcga tcaacacat
360
agggatcggtt ggggtccacca catacaccga gcggaatcg agcggatcag acctc
415

<210> 460

<211> 105

<212> PRT

<213> Homo sapiens

<400> 460

Met Pro Met Ile Gly Phe Glu Glu Ala Arg Lys Ile Arg Arg Gly Leu
1 5 10 15
Arg Lys Ser Asp Ala Gln Leu Ser Gly Glu Ala Ser Pro Phe Lys His
20 25 30
Val Gln Ile Pro Arg Glu Gly Arg Ala Gln Ser Ser Ala Gly Ser Ile
35 40 45
Asn His Arg Asn Arg Ala Ala Arg Asp Gln Glu Arg Glu Arg Lys Arg
50 55 60
Leu Glu Ala Gln Arg Gln Asp Pro Ser Arg Pro Val Val Glu Thr Ile
65 70 75 80
Thr Glu Val Ser Cys Ser Thr Pro Ala Leu Ser Ala Ala Pro Pro Arg
85 90 95
Arg Lys Ser Met Glu Ala Asp Ala Glu
100 105

<210> 461

<211> 357

<212> DNA

<213> Homo sapiens

<400> 461

acgcgttcga ggctcggttaa atttatcatg cgcacgacaa agagagtagt ggctcacaac
60
cgggctcacat gcatgatgac aaaaactggc agaataagagt tgatgtcatc ccgtctacca
120
gtcctctagaa ccagctcaga gactcccggt gtcggtagcg tcgagactca gtacacaact
180
gtcgcgatac cggacgaccc tcttcactctg gttgcagatg ggcgtctcaa tcacgtcaat
240
gtcgtcttacg aaacctacgg gaagctcaat acgtccacg ccaatgcggt ctatacctgt
300
catgcgctta ctggtgatgc ccatgcagcc ggatttcacc ccggtgtagt ccgtccg
357

<210> 462
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 462
 Thr Arg Ser Arg Ser Ala Lys Phe Ile Met Arg Thr Thr Lys Arg Val
 1 5 10 15
 Val Ala His Asn Arg Val Thr Cys Met Met Thr Lys Thr Gly Arg Ile
 20 25 30
 Glu Leu Met Ser Ser Arg Leu Pro Ala Pro Arg Thr Ser Ser Glu Ser
 35 40 45
 Pro Gly Val Gly Thr Val Glu Thr Gln Tyr Thr Thr Val Ala Ile Pro
 50 55 60
 Asp Asp Pro Leu His Leu Val Ala Asp Gly Arg Leu Asn His Val Thr
 65 70 75 80
 Val Ala Tyr Glu Thr Tyr Gly Lys Leu Asn Thr Ser Ser Asp Asn Ala
 85 90 95
 Val Tyr Thr Cys His Ala Leu Thr Gly Asp Ala His Ala Ala Gly Phe
 100 105 110
 His Pro Gly Val Val Arg Pro
 115

<210> 463
 <211> 434
 <212> DNA
 <213> Homo sapiens

<400> 463
 gtgcacgggg tatgcgaggg atgcggcatt gccaccaatg ccgctgacct gcgcagatac
 60
 gaggcagctg gtgacgatga agtggtgcga tgcgaggaat gcgacgtat cctggtgctg
 120
 accggagagt ccatctgagc cttctctgtg cgggtgatgc cgggatatcc gtagaattag
 180
 cggtcggaac agccatccgg gtgatcgagg cagcggtgag ttgtcgagga aagtcggggc
 240
 tccatagagc aggggtgtgg gtaacgccca cccgggggtga cccgcggaag agtgccacag
 300
 agaacagact gccggtttcg agccggtgag ggtgaaacgg tggagtaagt gccaccgcg
 360
 tcatcggtga cggtgacggc atggcaaac ccacctggag caaggccaag aagaccgtga
 420
 ggtcgcggac gcgt
 434

<210> 464
 <211> 127
 <212> PRT
 <213> Homo sapiens

<400> 464
 Met Pro Ser Pro Ser Pro Met Thr Arg Trp Ala Leu Thr Pro Pro Phe

```

      1           5           10           15
His Pro His Arg Leu Glu Thr Gly Ser Leu Phe Ser Val Ala Leu Ser
      20           25           30
Arg Gly Ser Pro Arg Val Gly Val Thr His His Pro Ala Leu Trp Ser
      35           40           45
Pro Asp Phe Pro Arg Gln Leu Thr Ala Ala Ala Ile Thr Arg Met Ala
      50           55           60
Arg Pro Thr Ala Asn Ser Thr Asp Ile Pro Ala Ser Pro Pro Gln Glu
      65           70           75
Gly Leu Arg Trp Thr Leu Arg Tyr Ala Pro Gly Tyr Asp Arg Ile Pro
      85           90           95
Arg Ile Ala Pro Leu His Arg His Gln Leu Pro Arg Ile Cys Ala Gly
      100          105          110
Gln Arg His Trp Trp Gln Cys Arg Ile Pro Arg Ile Pro Arg Ala
      115          120          125

```

<210> 465

<211> 438

<212> DNA

<213> Homo sapiens

<400> 465

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gatcatttag aatztatgga agaagctgat gtgaaagcta tggtaaatac tggcactgtg
60
gctgtattgc taccaggagc attttacacc ttgaaagaaa ctcaacttcc accgatgaat
120
ttgttacgtc agtacggagt agacattgct atttcgacgg atgctaatacc agggacgtcg
180
ccagcgttat cattacggtt aatgatgaat atggcatgta ccttgtttgg tatgacacct
240
gaaaccgccc ttgcaggggt aacaattcat gcggcaaaaag cgttggggat tagcgattct
300
catggcactt tagaagttgg caaggtagct gattttgtct gctgggatgt gaaagcccc
360
ggtggaactt gttattggtt aggagagcag ttagtaaaagc aacgtattca gcacggagta
420
tcccatgaat aatctaga
438

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<210> 466

<211> 143

<212> PRT

<213> Homo sapiens

<400> 466

```

Asp His Leu Glu Phe Met Glu Glu Ala Asp Val Lys Ala Met Val Lys
1           5           10           15
Ser Gly Thr Val Ala Val Leu Leu Pro Gly Ala Phe Tyr Thr Leu Lys
20          25          30
Glu Thr Gln Leu Pro Pro Met Asn Leu Leu Arg Gln Tyr Gly Val Asp
35          40          45
Ile Ala Ile Ser Thr Asp Ala Asn Pro Gly Thr Ser Pro Ala Leu Ser
50          55          60
Leu Arg Leu Met Met Asn Met Ala Cys Thr Leu Phe Gly Met Thr Pro

```

```

65              70              75              80
Glu Thr Ala Leu Ala Gly Val Thr Ile His Ala Ala Lys Ala Leu Gly
            85              90              95
Ile Ser Asp Ser His Gly Thr Leu Glu Val Gly Lys Val Ala Asp Phe
            100             105             110
Val Cys Trp Asp Val Glu Ser Pro Gly Glu Leu Cys Tyr Trp Leu Gly
            115             120             125
Glu Gln Leu Val Lys Gln Arg Ile Gln His Gly Val Ser His Glu
            130             135             140

```

<210> 467

<211> 460

<212> DNA

<213> Homo sapiens

<400> 467

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ntttccctgg ctattggcca tgtgggacac aacgtttcgc ctaccccgaga gcggttaagc
60
tgcatccctg cactctcttc tcccaccgct tcaaagccac agtgaggaac ttcggagctt
120
ctcgagtgat agatggcggt ggaggaatgg atgcctctgg tagaagaggg ggaatatctg
180
ttgattgtgt ggaccgacca caaaaacctg gagtatctcc acacaaccaa gtgcctcaac
240
tcaggcgcaag caagaagggc ccagctgttt acctgggtcc acttttccct ctctacggg
300
ccgggggtcca agaaccatcag gctgggatgcc cttctttgac actttatggg catggggcca
360
ttcctccagg cttgcctgtc acccggggtc ccgtcaaac ctggccttcg tgcgacaaca
420
ctcttggtgc cttctatggt tctgtatggt gcgcgaattg
460

```

<210> 468

<211> 118

<212> PRT

<213> Homo sapiens

<400> 468

```

Gly Thr Ser Glu Leu Leu Ala Val Lys Met Ala Leu Glu Glu Trp Met
1              5              10              15
Pro Trp Leu Glu Glu Ala Glu Tyr Leu Leu Ile Val Trp Thr Asp His
20             25             30
Lys Asn Leu Glu Tyr Leu His Thr Thr Lys Cys Leu Asn Ser Arg Gln
35             40             45
Ala Arg Arg Ala Gln Leu Phe Thr Trp Phe His Phe Ser Leu Ser Tyr
50             55             60
Arg Pro Gly Ser Lys Asn Ile Arg Leu Asp Ala Leu Ser Cys His Phe
65             70             75             80
Met Gly Met Gly Pro Phe Leu Gln Ala Cys Leu Ser Pro Gly Leu Pro
85             90             95
Ser Asn Pro Gly Leu Arg Ala Thr Thr Leu Leu Val Pro Ser Met Val
100            105            110
Leu Tyr Val Ala Ala Ile

```

115

<210> 469
 <211> 381
 <212> DNA
 <213> Homo sapiens

<400> 469
 cttgtgcaca cggtattttt ccaatacaaa tagtttaaaa agtaaacctc aaatacctat
 60
 aagccccctc aaagcacctt ccaaatatga accttggttaa tgcccaaggt ccagaggggt
 120
 cccccagaaa ggcccaggag cctggggcat gggaaagctg tcgggggtccc catgctgact
 180
 ccctggactc caaegatat tccataaagc cagggcctcc tggctgcggg agggaggcct
 240
 tgacccaaaa tccattcggc cctggatact ggagaggcag aggcctctgc tgatgagaag
 300
 ccctgagttc ctggctagct gtggtaacc acaaaaaatg cgggggggtga tgattttcga
 360
 agtccatcgg caaagaaaga c
 381

<210> 470
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 470
 Met Asp Phe Glu Asn His His Pro Pro His Phe Leu Trp Leu Thr Thr
 1 5 10 15
 Ala Ser Gln Glu Leu Arg Ala Ser His Gln Gln Arg Pro Leu Pro Leu
 20 25 30
 Gln Tyr Pro Gly Pro Asn Gly Phe Trp Val Lys Ala Ser Leu Pro Gln
 35 40 45
 Pro Gly Gly Pro Gly Phe Met Glu Tyr Arg Leu Glu Ser Arg Glu Ser
 50 55 60
 Ala Trp Gly Pro Arg Gln Leu Ser His Ala Pro Gly Ser Trp Ala Phe
 65 70 75 80
 Leu Gly Asp Pro Ser Gly Pro Trp Ala Leu Thr Arg Phe Ile Phe Gly
 85 90 95
 Arg Cys Phe Glu Gly Ala Tyr Arg Tyr Leu Glu Phe Thr Phe
 100 105 110

<210> 471
 <211> 378
 <212> DNA
 <213> Homo sapiens

<400> 471
 accggtgact acctgcagca ctggattgac atgggtaaaa agggcgcgga ccgcatgcc
 60
 gaggtcttcc tggtaactg gtccgcgcgc ggagacgatg gccgcttct gtggcgngg
 120

cttggcgaaa acttcccgtt cctanagtgg atcatcgacc gcattgaagg caacgtagag
 180
 gccgaggaca cggtggtcgg acgcaccgcc cgcgccgagg acatcgactt gcaaggcctt
 240
 gacttcgatg tcgacgacgt tcgcgccgca ctgcgcgttg acccgaaagg atgggaaggc
 300
 gatatgcaag acaacgccga gtacctgaac ttctgggctt cccgcgtgcc cgaggaagtg
 360
 tggaaccagt tccgcgcc
 378

<210> 472

<211> 126

<212> PRT

<213> Homo sapiens

<400> 472

Thr	Gly	Asp	Tyr	Leu	Gln	His	Trp	Ile	Asp	Met	Gly	Lys	Lys	Gly	Gly
1				5				10						15	
Asp	Arg	Met	Pro	Glu	Val	Phe	Leu	Val	Asn	Trp	Phe	Arg	Arg	Gly	Asp
			20				25						30		
Asp	Gly	Arg	Phe	Leu	Trp	Pro	Xaa	Leu	Gly	Glu	Asn	Phe	Pro	Val	Leu
			35				40					45			
Xaa	Trp	Ile	Ile	Asp	Arg	Ile	Glu	Gly	Asn	Val	Glu	Ala	Glu	Asp	Thr
			50			55				60					
Val	Val	Gly	Arg	Thr	Ala	Arg	Ala	Glu	Asp	Ile	Asp	Leu	Gln	Gly	Leu
					70					75				80	
Asp	Phe	Asp	Val	Asp	Val	Arg	Ala	Ala	Leu	Ala	Val	Asp	Pro	Lys	
				85				90					95		
Glu	Trp	Glu	Gly	Asp	Met	Gln	Asp	Asn	Ala	Glu	Tyr	Leu	Asn	Phe	Leu
			100				105						110		
Gly	Ser	Arg	Val	Pro	Glu	Glu	Val	Trp	Asn	Gln	Phe	Arg	Ala		
			115				120					125			

<210> 473

<211> 339

<212> DNA

<213> Homo sapiens

<400> 473

accggttggt gggggaagg acccatccca tgccacctgt cctagaaaat gtttccccctt
 60
 gttgagcagc tgctggatct agggctgctg ggtctaagtc caaaaaggga aaaaggaaaa
 120
 aggcaccaag taaaagaagg gggaagctgc caaaaccccc cctgccaaaa ctctccccc
 180
 ctgcttcac ttccctctcc agggaacagg tgtacctccc ctctccctg tcctcctcag
 240
 atgcccagg ggctctctac ttcatctctg ccgaccctgc caggagtggc ctccaggggta
 300
 gaggctccta gttggagaat ttgcttgac gaaggtgaa
 339

<210> 474

<211> 97
 <212> PRT
 <213> Homo sapiens

<400> 474
 Met Phe Pro Leu Val Glu Gln Leu Leu Asp Leu Gly Leu Leu Gly Leu
 1 5 10 15
 Ser Pro Lys Arg Glu Lys Gly Lys Arg His Gln Val Lys Glu Gly Gly
 20 25 30
 Ser Cys Gln Asn Pro Pro Cys Gln Asn Ser Pro Thr Leu Leu Pro Phe
 35 40 45
 Pro Ser Pro Gly Asn Arg Cys Thr Ser Pro Pro Pro Cys Pro Pro Gln
 50 55 60
 Met Pro Gln Gly Leu Ser Thr Ser Phe Leu Pro Thr Leu Pro Gly Val
 65 70 75 80
 Ala Ser Gly Val Glu Ala Pro Ser Trp Arg Ile Cys Leu Gln Glu Gly
 85 90 95
 Glu

<210> 475
 <211> 345
 <212> DNA
 <213> Homo sapiens

<400> 475
 acgcgtgaag ggtccctccc aaactctgag cctccttcca agccttgctg ggagctcccc
 60
 agcgctgtgcc ggagaggcct ctctctccagg cggtgcttccc gcgccgatgt gaaggagagg
 120
 ctgccccaga ggggtctgga tcgtaatcca gaaagggaca gtccacacag cataatcccg
 180
 aatgctggga ctcttcagta aaggaagaga tggctttttc gttcatctgc ctttctgaaa
 240
 ggtaaaaatat ctccagatcc gggctctctg ggcgaactgc tatgtggggg tccctgaagc
 300
 ctttgatgga tcttggttaga agtgggttgt tcactctggg gtttt
 345

<210> 476
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 476
 Met Asn Asn Pro Leu Leu Thr Arg Ser Ile Lys Gly Phe Arg Asp Pro
 1 5 10 15
 His Ile Arg Ser Arg Pro Glu Ser Pro Asp Leu Glu Ile Phe Tyr Leu
 20 25 30
 Ser Glu Arg Gln Met Asn Glu Lys Ala Ile Ser Ser Phe Thr Glu Glu
 35 40 45
 Ser Gln His Ser Gly Leu Trp Leu Trp Asp Cys Pro Phe Leu Asp Tyr
 50 55 60
 Asp Pro Asp Pro Ser Gly Ala Ala Ser Pro Ser His Arg Arg Gly Lys

65						70						75						80
Pro	Ala	Trp	Arg	Arg	Gly	Leu	Ser	Gly	Arg	Arg	Trp	Gly	Ala	Pro	Ser			
				85					90					95				
Lys	Ala	Trp	Lys	Glu	Ala	Gln	Ser	Leu	Glu	Gly	Thr	Leu	His	Ala				
			100					105					110					

```
<210> 477
<211> 422
<212> DNA
<213> Homo sapiens
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400> 477
acgcgtggcc gagccagcgt gctcaaggaa atggtcaacg gcactcttat taacggctgg
60
gactctcccc aggtggaacg ggcactggac ctgtgcatgg cgtgcaaaagg gtgcgcccca
120
gatgcccaca ccggaatcga catggccagc taccgcagca cggttcttga cgaaaaatac
180
cgtcacccgc tcgccctcg cteccacctg acgatggggc tgetgcccac gtgggaacgt
240
ttgctcaatc ggaccccagg agcgcctcg ctggctaacg castgtcttc gatgccggtc
300
ttgcgacgtc ttgctagatg gacagccggg gtggatcagc gtcgtccctt cccccgattc
360
cagccctcgg ccagattggc cagtcccgag gcgcgcccg ttaaggagat ttgtggcgga
420
cc
422

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<210> 478
<211> 140
<212> PRT
<213> Homo sapiens
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400> 478
Thr Arg Gly Arg Ala Ser Val Leu Lys Glu Met Val Asn Gly Thr Leu 1 5 10 15
Ile Asn Gly Trp Asp Ser Pro Glu Val Glu Arg Ala Leu Asp Leu Cys 20 25 30
Met Ala Cys Lys Gly Cys Ala Arg Asp Cys Pro Thr Gly Ile Asp Met 35 40 45
Ala Ser Tyr Arg Ser Thr Val Leu Asp Glu Lys Tyr Arg His Arg Leu 50 55 60
Arg Pro Arg Ser His Leu Thr Met Gly Leu Leu Pro Met Trp Glu Arg 65 70 75 80
Leu Leu Asn Arg Thr Pro Gly Ala Pro Ser Leu Ala Asn Ala Val Leu 85 90 95
Ser Met Pro Val Phe Ala Arg Leu Ala Arg Trp Thr Ala Gly Val Asp 100 105 110
Gln Arg Arg Pro Leu Pro Arg Phe Gln Pro Ser Ala Arg Leu Ala Ser 115 120 125
Pro Gln Ala Ala Pro Val Lys Glu Ile Val Ala Asp 130 135 140

<210> 479
 <211> 348
 <212> DNA
 <213> Homo sapiens

<400> 479
 gcgctggcca ttggcgggc gctggtgcgg caccgcgac tggatgattgc cgatgagccg
 60
 atctcggcgt tggacatgac catccagaag cagattcttg agctgttcga ggcctgcgag
 120
 gcgcagtagc gctttgcctg cctgttcac tccacgacc tggcagcggg ggaacgcacg
 180
 gccaccggg tggcgggat gagcgagggc aggggtggtg aaatgggtgc ccgcgacgag
 240
 atcttcgacc gcccgacga cccctacacc cgcaagctgc tggccgccc cagcccttg
 300
 gaaaaacttg aaaacggtgg ctaccgcatc cgccagggcc cgtaccg
 348

<210> 480
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 480
 Arg Val Ala Ile Gly Arg Ala Leu Val Arg His Pro Arg Leu Val Ile
 1 5 10 15
 Ala Asp Glu Pro Ile Ser Ala Leu Asp Met Thr Ile Gln Lys Gln Ile
 20 25 30
 Leu Glu Leu Phe Glu Arg Leu Gln Ala Gln Tyr Gly Phe Ala Cys Leu
 35 40 45
 Phe Ile Ser His Asp Leu Ala Ala Val Glu Arg Ile Ala His Arg Val
 50 55 60
 Ala Val Met Ser Glu Gly Arg Val Val Glu Met Gly Ala Arg Asp Glu
 65 70 75 80
 Ile Phe Asp Arg Pro Gln His Pro Tyr Thr Arg Lys Leu Leu Ala Ala
 85 90 95
 Ala Ser Pro Leu Glu Lys Leu Glu Asn Gly Gly Tyr Arg Ile Arg Gln
 100 105 110
 Gly Pro Val Pro
 115

<210> 481
 <211> 441
 <212> DNA
 <213> Homo sapiens

<400> 481
 aagcttctga ctgtggcatt ctccctgctt aatatgtcct caatatcccc tacttactgg
 60
 gcaaaatcct gcttatgctt tgggactagc tcaaagacca ctcccttgga tgggtgccttc
 120
 cctgccctgc cggttgcgc tggcttcctc agtggttaga ttaccatcac attgcatcat
 180

gagagcagaa gaccatctcc atgtgactgc tgcccctgct cccagcaggg ccacacaan
 240
 cccagtcag gacctggctc acgctgggtg gcggatgccc aggaatgggg ctctggatct
 300
 gccctttctc ctgcaggacc aggaaccgc tgcccctgctc ctgcccagc aaacctcag
 360
 taaatcccca gtcatttgag tttccctca gcgccagaga ccaataacac atctccacca
 420
 acctgaaaaa ccttcacgcy t
 441

<210> 482

<211> 120

<212> PRT

<213> Homo sapiens

<400> 482

Lys	Leu	Leu	Thr	Val	Ala	Phe	Ser	Leu	Leu	Asn	Met	Ser	Ser	Ile	Ser
1				5				10						15	
Pro	Thr	Tyr	Trp	Ala	Lys	Ser	Cys	Leu	Cys	Phe	Gly	Thr	Ser	Ser	Lys
			20					25					30		
Thr	Thr	Pro	Leu	Asp	Gly	Ala	Phe	Pro	Ala	Leu	Pro	Ala	Cys	Ala	Gly
			35				40					45			
Phe	Leu	Ser	Val	Arg	Ile	Thr	Ile	Thr	Leu	His	His	Glu	Ser	Arg	Arg
	50				55				60						
Pro	Ser	Pro	Cys	Asp	Cys	Cys	Pro	Cys	Ser	Gln	Gln	Gly	Pro	Gln	Xaa
65				70					75					80	
Pro	Ser	Pro	Gly	Pro	Gly	Ser	Arg	Trp	Val	Ala	Asp	Ala	Gln	Glu	Trp
			85					90					95		
Gly	Ser	Gly	Ser	Ala	Ser	Ser	Pro	Ala	Gly	Pro	Gly	Asn	Arg	Cys	Pro
			100				105					110			
Val	Pro	Ala	Pro	Gly	Asn	Pro	Gln								
			115				120								

<210> 483

<211> 330

<212> DNA

<213> Homo sapiens

<400> 483

acgcgttcat tccctgatgg ccacgcacga gctaaccgag ggaatggggcg aagggaaggc
 60
 caaggttgcc tcgaagacca aggagtgtgc agggcaggac ctgcttttaa aggaatatcc
 120
 tctcaccaga gacacgcggc gccaggcag ggcgggagcg gggcctgtgc ccaggctccg
 180
 agcgtctgcc cagcccagca tcctgttccc cagccaggaa tatgtcttcg tggcatagag
 240
 ggagctcttg gagccacacc tgctgtgtga catgtgtcac cccactgctg ggaggggctc
 300
 tccggggacc ctgcagcgtg ggctggggcc
 330

<210> 484

<211> 96
 <212> PRT
 <213> Homo sapiens

<400> 484
 Met Gly Arg Arg Glu Gly Gln Gly Cys Leu Glu Asp Gln Gly Val Cys
 1 5 10 15
 Arg Ala Gly Pro Arg Phe Lys Gly Ile Ser Ser His Gln Arg His Ala
 20 25 30
 Ala Ala Arg Gln Gly Arg Ser Gly Ala Cys Ala Gln Ala Pro Ser Val
 35 40 45
 Cys Pro Ala Gln His Pro Cys Pro Gln Pro Gly Ile Cys Leu Arg Gly
 50 55 60
 Ile Glu Gly Ala Leu Gly Ala Thr Pro Ala Cys Ala His Val Ser Pro
 65 70 75 80
 His Cys Trp Glu Gly Leu Ser Arg Asp Pro Ala Ala Trp Ala Gly Pro
 85 90 95

<210> 485
 <211> 377
 <212> DNA
 <213> Homo sapiens

<400> 485
 acgcgtgctc gcgcggacga agtcggcgct gatcgcccag tcatgcgccc tgcccgtgcc
 60
 gccaggtctc gcgatcgccg cattcgccgc gccggaatcg agaaggaatg cgtggacgta
 120
 cgggggatac caaaggaatc ttgtcgaggg ctcgcggccc ctcgacgtgg atcacctgta
 180
 cccgacggac gtggggaagc cgtcccgcaa gctcacggga ctccgcgaca tcgatgtgcg
 240
 atacgatttg caccgtcgtc ggctgcgtgc gcgacacatg ctccgcgata gcctcagcgg
 300
 tggtttccga cgtcagcagg aacgtggcga cgggtggcat ggcggtcgcc gttatgtcgg
 360
 cattccatt cctcggg
 377

<210> 486
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 486
 Met Arg Pro Ala Arg Ala Ala Gln Phe Gly Asp Arg Arg Ile Arg Pro
 1 5 10 15
 Ala Gly Ile Glu Lys Glu Cys Val Asp Val Arg Gly Ile Pro Lys Glu
 20 25 30
 Ser Cys Arg Gly Leu Arg Gly Pro Arg Arg Gly Ser Pro Val Pro Asp
 35 40 45
 Gly Arg Gly Glu Ala Val Pro Gln Ala His Gly Thr Pro Arg His Arg
 50 55 60
 Cys Ala Ile Arg Phe Ala Pro Ser Ser Ala Ala Cys Ala Thr His Ala

```

65              70              75              80
Pro Arg Ser Pro Gln Arg Trp Phe Pro Thr Ser Ala Gly Thr Trp Arg
      85              90              95
Arg Val Ala Trp Arg Ser Pro Leu Cys Arg His Ser His Ser Ser
      100             105             110

<210> 487
<211> 459
<212> DNA
<213> Homo sapiens

<400> 487
nnacgcgtaa gatcgattgt ggatcagcac cgaatcgtggt cccccgacg ttgttggttg
60
cgggtgttgt tgtaaggagt gtgtgtgatg cgtgttggtg ttctactga ggtaaagaat
120
agtgaagtttc gtgtggctgt gacgcggcgc ggtgttcgat cgttggttg tgctggatc
180
gaggtgttg ttcaggctgg tgctggtgtg ggttcgggta ttccggatc ggattttgtg
240
ggtgctggtg cgcgggttgt gggatgatgt gagtcggtg ggggtgatgc tgatttggtg
300
ttgaagtgta aggagcctgt tgcggaggag tatgggcggt tgcatagggg tttggtcttc
360
tttacgtatc ttcatttggc tgctgatgag cgttgactc gtgagctttt ggggcgtggg
420
gtgacgtcga ttgcgtatga gacggtggag ttggccgat
459

<210> 488
<211> 124
<212> PRT
<213> Homo sapiens

<400> 488
Met Arg Val Gly Val Pro Thr Glu Val Lys Asn Ser Glu Phe Arg Val
1      5      10      15
Ala Val Thr Pro Ala Gly Val His Ala Leu Val Gly Arg Gly His Glu
20     25     30
Val Leu Val Gln Ala Gly Ala Gly Val Gly Ser Gly Ile Pro Asp Ser
35     40     45
Asp Phe Val Gly Ala Gly Ala Arg Val Val Gly Asp Val Glu Ser Val
50     55     60
Trp Gly Asp Ala Asp Leu Val Leu Lys Val Lys Glu Pro Val Ala Glu
65     70     75     80
Glu Tyr Gly Arg Leu His Glu Gly Leu Val Phe Thr Tyr Leu His
85     90     95
Leu Ala Ala Asp Glu Ala Leu Thr Arg Glu Leu Leu Gly Arg Gly Val
100    105    110
Thr Ser Ile Ala Tyr Glu Thr Val Glu Leu Ala Asp
115    120

<210> 489
<211> 542

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<212> DNA

<213> Homo sapiens

<400> 489

nacgcgtttg gcgtactgag tgcggtgggtg gatggcgacg acagtggcaa gccgctgttc
 60
 aaccagcacg gttgctacaa agtgcgcttt ccatttaccg gcgatcaaaa gccccagcact
 120
 cgggggttcg catggctgcg caggggtgtcg ttgtctgccc gtccagacca tggcatgcac
 180
 ttcccgctgc tcaaggcgag tgaagtgttg gtgtcatttc tggggggcga ccccgaccgg
 240
 cggattatcg ttggctgcgt accaaactcg gaaacccga gcatggctgt tgagcgtaac
 300
 gccaccacaga gcggcttctc caccggccga gggcacttcc tggcgatgga agaccacccc
 360
 ggggctgccc atctgaagct ggggtgcgcct ggcggcaaca gcgtcttcac actgggcaat
 420
 ggcaaaagtcg ccggcgcgca actgcgcacc aacgccccac atgcaattga catcgcttcc
 480
 gctcaaacac gaagtgcccg gcgtgtactc attgtcgatg ggcaccgggg acccgggcgg
 540
 cg
 542

<210> 490

<211> 180

<212> PRT

<213> Homo sapiens

<400> 490

Xaa Ala Phe Gly Val Leu Ser Ala Val Val Asp Gly Asp Asp Ser Gly
 1 5 10 15
 Lys Pro Leu Leu Asn Gln His Gly Cys Tyr Lys Val Arg Phe Pro Phe
 20 25 30
 Thr Arg Asp Gln Lys Pro Ser Thr Arg Gly Ser Ala Trp Leu Arg Arg
 35 40 45
 Val Ser Leu Ser Ala Gly Ser Ser His Gly Met His Phe Pro Leu Leu
 50 55 60
 Lys Gly Ser Glu Val Leu Val Ser Phe Leu Gly Gly Asp Pro Asp Arg
 65 70 75 80
 Pro Ile Ile Val Gly Cys Val Pro Asn Ser Glu Thr Pro Ser Met Val
 85 90 95
 Val Glu Arg Asn Ala Thr Gln Ser Gly Phe Ser Thr Ala Gly Gly His
 100 105 110
 Phe Leu Ala Met Glu Asp His Pro Gly Ala Ala His Leu Lys Leu Gly
 115 120 125
 Ala Pro Gly Gly Asn Ser Val Phe Thr Leu Gly Asn Gly Lys Val Ala
 130 135 140
 Gly Ala Gln Leu Arg Thr Asn Ala Pro His Ala Ile Asp Ile Val Phe
 145 150 155 160
 Ala Gln Thr Arg Ser Ala Arg Arg Val Leu Ile Val Asp Gly His Arg
 165 170 175
 Gly Pro Gly Gly

180

<210> 491
 <211> 825
 <212> DNA
 <213> Homo sapiens

<400> 491
 nacgcgtcga ggcgacggtc ggcgcgctca tggcgactgt tctcgagggc acatggggaac
 60
 gcacgtgtgc cggattccgg actgccttaa ccacagcctt ggaacgcacc gatgaattgg
 120
 tgggcggccc tgacagcaag cccctcaacg aagtcgagac actgcgccgg tgcgccgatg
 180
 aactcatcgg cggggcccgtc ggcgcggttg ccgcgatgca cggagggtca atcgaattgg
 240
 tcgacgtgtc ggtcgggtgac gaagagcgca gagtcgacgt caccatgaag ggagcatgcc
 300
 gaggttgccc ggcagccatc agaccctaca tcagcgcctg gaacatcaac tgagctctgcg
 360
 nattgcgcga gccgggtacc gtgcgggaaa tctgacacct actccgacag ctccacctcg
 420
 acgagcacct ccaogacgag gccaaagccac tcgtagacgc attcctcctc ggcatccaat
 480
 tcctcccggg ccgcccgcgc gacttcgctg gcagtaacct ggtcgatgat ccctagcctg
 540
 gcggccatca tgccaacgcag cgcattgaca gtacgaagcc aacgttgctg catcacaggg
 600
 ttcattggaga tacagccggt tcggtgcaac gtctccacat cagcacttaa ggactgagcg
 660
 tcttcccgac gcgcccgcgc atcctcggcg tcattggtcga catggaattg cgcgtcagct
 720
 gagtcgctgt cacgatagcg gctgggcagg atcaatcgac gcaccctcgt gtctcctctg
 780
 agtccagaaa actggctctc ccaaaaagcg aacgggtccc cctcc
 825

<210> 492
 <211> 58
 <212> PRT
 <213> Homo sapiens

<400> 492
 Met Asn Gly Trp Ala Ala Leu Thr Ala Ser Pro Ser Thr Lys Ser Arg
 1 5 10 15
 His Cys Ala Gly Ala Pro Met Asn Ser Ser Ala Gly Pro Ser Ala Arg
 20 25 30
 Leu Pro Arg Cys Thr Glu Gly Gln Ser Asn Trp Ser Thr Cys Arg Ser
 35 40 45
 Val Thr Lys Ser Ala Glu Ser Thr Ser Pro
 50 55

<210> 493
 <211> 863

<212> DNA

<213> Homo sapiens

<400> 493

nacgcgttcc aacctcgtea aaacggctat cgcaggaaat gacccaact ggggtcgcat
 60
 cctcgcgccg atcggatgtg ttctcgagaa tatagctccc ttcatcccg accagggtga
 120
 tgtgtccatc aatgacattc agatctgtaa ggcggggggg atcggggagg accgcaacct
 180
 cgtcgatatg agggccacgag aggttcacat cgatattgag ctgcatgcgg gtgatgccga
 240
 agctcgcgga tggactaatg atctgaccca ccaatacgtc gaagagaata gcgcgtatcc
 300
 atcatgaccc ttgctcttga catccccctc aacgaactccc agttctcggc tcaggcgaaa
 360
 tctgaggtcc tggtagaagc gctgccttgg atcaggcggt ttcaggcccg cactgtcgtc
 420
 gtgaaatatg gcggcaacgc gatggttgat cccggctctgc agcaggcctt gcgcgacgac
 480
 attgtgttta tggcctctgt ggggattcgc cctattgtcg tccacggtgg tggccctcag
 540
 atcaatgcca tgcttgctga atccgctacc ccggtggagt tccgtaatgg ttctggggtg
 600
 acatctccgg aggtcatgga ggttgctcgg atggtgctcg tcgggcagggt gggccgctag
 660
 ctctttaacc gaatcaacgc ctatgcgccg ctacgagctg gcattgtcagg cgaggacttt
 720
 ggcctttttt cgcccccggaa gtgcgggta attgttgatg gcgagcaaat agacatgggt
 780
 ttagtgggag acatcgttga cgtcaacatc gatctcgcta tctctatgct tgatcgcggg
 840
 cagattccgg tcattgcacc ggt
 863

<210> 494

<211> 186

<212> PRT

<213> Homo sapiens

<400> 494

Met Thr Leu Ala Leu Asp Ile Pro Leu Asn Asp Ser Gln Phe Ser Ala
 1 5 10 15
 Gln Arg Lys Ser Glu Val Leu Val Glu Ala Leu Pro Trp Ile Arg Arg
 20 25 30
 Phe Gln Gly Arg Thr Val Val Val Lys Tyr Gly Gly Asn Ala Met Val
 35 40 45
 Asp Pro Gly Leu Gln Gln Ala Phe Ala Asp Asp Ile Val Phe Met Ala
 50 55 60
 Ser Val Gly Ile Arg Pro Ile Val Val His Gly Gly Gly Pro Gln Ile
 65 70 75 80
 Asn Ala Met Leu Ala Glu Ser Ala Thr Pro Val Glu Phe Arg Asn Gly
 85 90 95
 Leu Arg Val Thr Ser Pro Glu Val Met Glu Val Val Arg Met Val Leu

```

          100              105              110
Val Gly Gln Val Gly Arg Gln Leu Val Asn Arg Ile Asn Ala Tyr Ala
      115              120              125
Pro Leu Ala Ala Gly Met Ser Gly Glu Asp Phe Gly Leu Phe Ser Ala
      130              135              140
Arg Lys Ser Arg Val Ile Val Asp Gly Glu Gln Ile Asp Met Gly Leu
      145              150              155              160
Val Gly Asp Ile Val Asp Val Asn Ile Asp Leu Val Ile Ser Met Leu
      165              170              175
Asp Arg Gly Gln Ile Pro Val Ile Ala Pro
      180              185

```

<210> 495

<211> 514

<212> DNA

<213> Homo sapiens

<400> 495

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gcgcgcgaca ccggtgcccc gattagcgtg ccagtggttg acgtcactaa gggtcacgtc
60
tggaatgtga caggtgacgt tcttaacgcc ngatccctcc acaatcgagg tgacnntgag
120
cgttggcgga tccaccggga tccccggccc ttcgatgacc ttgagcccga gaccgagatg
180
ctggagaccg gtattaaggt ccttgacttg ctgactcctt acgtcaaggg cggaagatt
240
ggcctctttg gcggcgctgg tgtgggtaag acggtgtctca ttcaggagat gatttaccgt
300
atcgcccaca acttcggcgg tacttcgggt ttgcgcgggt tcggtgagcg tacccgcgag
360
ggtaacgacc tcatcaacga gatggacgag gccggtgtgc tcaaagacac gcgcctggta
420
ttcggccaga tggacgagcc cccgggcaag cggtacgagc tgctgcgctg gcagccctgc
480
ggcccatgcc tggtcaactg ctgtgggacc ttgg
514

```

<210> 496

<211> 171

<212> PRT

<213> Homo sapiens

<400> 496

```

Ala Arg Asp Thr Gly Ala Pro Ile Ser Val Pro Val Gly Asp Val Thr
1      5      10      15
Lys Gly His Val Trp Asn Val Thr Gly Asp Val Leu Asn Ala Xaa Ser
      20      25      30
Leu His Asn Arg Gly Asp Xaa Glu Arg Trp Pro Ile His Arg Asp Pro
      35      40      45
Pro Ala Phe Asp Asp Leu Glu Pro Glu Thr Glu Met Leu Glu Thr Gly
      50      55      60
Ile Lys Val Leu Asp Leu Leu Thr Pro Tyr Val Lys Gly Gly Lys Ile
      65      70      75      80
Gly Leu Phe Gly Gly Ala Gly Val Gly Lys Thr Val Leu Ile Gln Glu

```

```

      85              90              95
Met Ile Tyr Arg Ile Ala His Asn Phe Gly Gly Thr Ser Val Phe Ala
      100              105              110
Gly Val Gly Glu Arg Thr Arg Glu Gly Asn Asp Leu Ile Asn Glu Met
      115              120              125
Asp Glu Ala Gly Val Leu Lys Asp Thr Ala Leu Val Phe Gly Gln Met
      130              135              140
Asp Glu Pro Pro Gly Thr Arg Tyr Glu Leu Ser Arg Trp Gln Pro Cys
      145              150              155              160
Gly Pro Cys Leu Val Asn Cys Cys Gly Thr Leu
      165              170

<210> 497
<211> 662
<212> DNA
<213> Homo sapiens

<400> 497
acgcgtcctg ggatctcaac cccagcagtc tggcttgttt ctcattccca caatttcctg
60
ggttcacca agcagcgaaa actgccagga tgaatgagga aaaaaccag cccacaaaac
120
gagacacacg ctggcgggga gagacgcagc agagctcctt cctgtctgtg gactcggagc
180
aaagacgtgt ggcccatct tttgtgtttt cctcaagcgg ggaagaatg gactgtttgc
240
atgcttcgtg ccacacgccc gcggtgatcc cagccagggc cccgagcgca gaggcggagc
300
tgtgtctcag acaggccttg gacctcccc ggccaggcacc tgtggggggg gcagcccccg
360
ggaaggaggc aactgcctca cttaacatcc tccgctgcaa ggtgggtggc ccgagaggcg
420
tgtctgtgaa gacaggtacc aggatggcag gaccgcacg cctcttccca cactgtcag
480
cttcggaagc atctctcgag gactctggtc ccaggatgtc tcccaggaca agccagctg
540
cctcttcctc ctactctgc tgtagcctgg gaccagacct ggccaaggtc agccagcggg
600
gaggggccag gtctgagctc tcgtcctgcc gtggcccccg cgatggcctt gggtgcaagc
660
tt
662

<210> 498
<211> 191
<212> PRT
<213> Homo sapiens

<400> 498
Met Asn Glu Glu Lys Thr Gln Pro His Lys Arg Asp Thr Arg Trp Arg
1 5 10 15
Gly Glu Thr Gln Gln Ser Ser Phe Leu Ser Val Asp Ser Glu Gln Arg
20 25 30
Arg Gly Ala Pro Ser Phe Val Phe Ser Ser Ser Gly Glu Arg Met Asp

```

```

          35              40              45
Cys Leu His Ala Ser Cys His Thr Pro Ala Val Ile Pro Ala Arg Ala
  50              55              60
Pro Ser Ala Glu Ala Glu Leu Cys Ser Ala Gln Ala Trp Asp Leu Pro
  65              70              75              80
Arg Gln Ala Pro Val Gly Gly Ala Ala Pro Gly Lys Glu Ala Thr Ala
          85              90              95
Ser Leu Asn Ile Leu Arg Cys Lys Val Val Ala Pro Arg Gly Val Ser
          100              105              110
Val Lys Thr Gly Thr Arg Met Ala Gly Pro Ala Arg Leu Phe Pro His
          115              120              125
Leu Ser Ala Ser Glu Ala Ser Leu Glu Asp Ser Gly Pro Arg Met Ser
          130              135              140
Pro Arg Thr Ser Gln Ser Ala Ser Ser Ser Tyr Phe Cys Cys Ser Leu
          145              150              155              160
Gly Pro Asp Leu Ala Lys Val Ser Gln Arg Gly Gly Pro Arg Ser Glu
          165              170              175
Leu Ser Ser Cys Arg Gly Pro Arg Asp Gly Leu Gly Cys Lys Leu
          180              185              190

```

<210> 499

<211> 444

<212> DNA

<213> Homo sapiens

<400> 499

```

acgcgtgaag ggtgggcagt gttgagctga gtgagccctc ctccctgcaa tgctggagacc
  60
ctgcctctctg cctgaccctc tggcttctca agcagctctat acgtgagaag ccctttcttc
  120
aagtgaagac ttctgagctc actacgagag cactggagct ggaacctctc tgggttcaaa
  180
tcctcaactg gggggttgga ggaggttact tcacttctca aaacctcaat ttccttatct
  240
gcaaaatggg gtaataggag cccctcttca tcaatgcttg gagggaatgc ctggcacagt
  300
agggcagtta ccgtcatgga gaacagaaa gccccgagct atcctggatg tggtgagaa
  360
gggtcctgga tcctgcctgc toggcctttt cattctcttc ttcacctaca ggctccacaa
  420
aagggcctct gaaaacacag ggtg
  444

```

<210> 500

<211> 105

<212> PRT

<213> Homo sapiens

<400> 500

```

Met Thr Val Thr Ala Leu Leu Cys Gln Ala Phe Pro Pro Ser Ile Asp
  1              5              10              15
Glu Glu Gly Leu Leu Leu Pro His Phe Ala Asp Lys Glu Ile Glu Val
          20              25              30
Leu Arg Ser Glu Val Thr Ser Ser Asn Pro Pro Val Glu Asp Leu Asn

```

	35		40		45										
Pro	Glu	Arg	Phe	Gln	Leu	Gln	Cys	Ser	Arg	Ser	Glu	Leu	Arg	Ser	Phe
	50				55						60				
His	Leu	Lys	Lys	Gly	Leu	Leu	Thr	Tyr	Arg	Leu	Leu	Arg	Lys	Pro	Glu
65					70					75				80	
Gly	Gln	Ala	Glu	Gly	Arg	Ala	Pro	Ala	Leu	Gln	Gly	Gly	Gly	Leu	Thr
			85					90						95	
Gln	Leu	Asn	Thr	Ala	His	Pro	Ser	Arg							
			100					105							

<210> 501

<211> 800

<212> DNA

<213> Homo sapiens

<400> 501

```

agatctgac cgagaagtgg ctgctcaggg aaatgactac tccatggctt tcttaactca
60
ggtactcctt attcaatgag aggcctgagg tgagaccgcg catgcggcgc gtggatcgca
120
tgggttagt gcacactagc aaggggctta ggtctccagc tgaggtcaga tgcacacttg
180
gaccttgtag tggggagtaa cacacatctc tgtgttcagc gaaccatcca ggagctgttt
240
gaagtttatt ctcccatgga tgatgctggc ttcccggcta aagctgagga gttttggtg
300
ctttctcagg aacctttctg caccgaaacc attgcaccca aaattgcaag acctttcata
360
gaggccctca agagtattga gtatctggag gaggatgccc agaagtcgc acaggagggg
420
gtgctgggac cacacactga tgctctgtca tcagactctg agaacatgcc gtgtgatgaa
480
gaaccatccc aattagagga gctagctgac ttcattggag agcttacacc aattgaaaaa
540
tatgctttaa attacctgga atcttgaggc agggcctgag agagcacgct gcgccgtact
600
tcacgagcgt cggcgagacc acggctccac gcctgtgca gtccctgag ctgaggctgg
660
tgcatgttga ctcaggatg cggcagttgg gggcggtgcc cgtgcgggag ctgcaactgg
720
cctggatgat gaggcgctct tgatgtgatt cgtttcccag ggaagttgga agcttttagct
780
atcttgcttc agaaactgaa
800

```

<210> 502

<211> 103

<212> PRT

<213> Homo sapiens

<400> 502

Met	Asp	Asp	Ala	Gly	Phe	Pro	Val	Lys	Ala	Glu	Glu	Phe	Val	Val	Leu
1				5				10				15			
Ser	Gln	Glu	Pro	Ser	Val	Thr	Glu	Thr	Ile	Ala	Pro	Lys	Ile	Ala	Arg

```

                20                25                30
Pro Phe Ile Glu Ala Leu Lys Ser Ile Glu Tyr Leu Glu Glu Asp Ala
   35                40                45
Gln Lys Ser Ala Gln Glu Gly Val Leu Gly Pro His Thr Asp Ala Leu
   50                55                60
Ser Ser Asp Ser Glu Asn Met Pro Cys Asp Glu Glu Pro Ser Gln Leu
   65                70                75                80
Glu Glu Leu Ala Asp Phe Met Glu Gln Leu Thr Pro Ile Glu Lys Tyr
   85                90                95
Ala Leu Asn Tyr Leu Glu Ser
   100

```

<210> 503

<211> 538

<212> DNA

<213> Homo sapiens

<400> 503

```

nnacgcgttg tcgtctctcc gatcattgat ttgtgtgtat tctgcaatga tgtaaaaggaa
60
gatgatgaca cggagaagtt taaagaagcc attgtgaaa ttcataaggct gtttgggatg
120
ccagaggaag agaaactcgt caactattac tcttgcagct attggaaggg gaaggtcccc
180
cgtcagggtt ggatgtacct cagcattaac cacctttgct tttattcttt tcttatggga
240
aggggaagcga aactggtcat cgggtgggta gacatcactc agcttgagaa gaatgccccc
300
ctgctttctgc ctgatgtgat caaagtgcgc acacggtcca gtgagcattt cttctctgtg
360
ttcttcaaca tcaacgagac cttcaagtta atggagcagc ttgccaaact agccatgagg
420
caactcttag acaatgaggg atttgaacaa gatcgatccc tgcccaaac caaaaggaaa
480
tctcctaaaa aagtgtctgc tctaaaaagt gatcttgatg cctggggcct tcacgcgt
538

```

<210> 504

<211> 179

<212> PRT

<213> Homo sapiens

<400> 504

```

Xaa Arg Val Val Val Ser Pro Ile Ile Asp Phe Val Val Phe Cys Asn
  1                5                10                15
Asp Val Lys Glu Asp Asp Asp Thr Glu Lys Phe Lys Glu Ala Ile Val
  20                25                30
Lys Phe His Arg Leu Phe Gly Met Pro Glu Glu Glu Lys Leu Val Asn
  35                40                45
Tyr Tyr Ser Cys Ser Tyr Trp Lys Gly Lys Val Pro Arg Gln Gly Trp
  50                55                60
Met Tyr Leu Ser Ile Asn His Leu Cys Phe Tyr Ser Phe Leu Met Gly
  65                70                75                80
Arg Glu Ala Lys Leu Val Ile Arg Trp Val Asp Ile Thr Gln Leu Glu

```

	85		90		95
Lys	Asn	Ala	Pro	Leu	Leu
	100		105	Val	Ile
Lys	Val	Ser	Thr	Arg	
Ser	Ser	Glu	His	Phe	Phe
	115		120	Leu	Asn
Lys	Leu	Met	Glu	Gln	Leu
	130		135	Ala	Met
Asn	Glu	Gly	Phe	Glu	Gln
	145		150	Asp	Arg
Ser	Pro	Lys	Lys	Val	Ser
	165		170	Ala	Leu
Leu	His	Ala			

<210> 505
 <211> 381
 <212> DNA
 <213> Homo sapiens

<400> 505
 gtgcacgaca ccgaacggta cgaacgtatc tcccaggcac gtcgcgagga acagcaggcc
 60
 atgctcggct acgaacgtc aagaacctgt cgcattgacct tgctcaccgg cgactgggac
 120
 gacccctcca cgactccttg cggacgctgc gacgtctgtg ctggcccggtg gtactcagtc
 180
 gaggtcgatc agtcagccgc tgtgagagcc gtccaatccc tcaaccgggt gggagttccg
 240
 gtggaaccac gcgccgctg gcccgagggt atggagcccc tccaggttgc gctcaagggt
 300
 cgcattcgtg ccgaggagat cgtctgcagag ggccgcgtca tcgccagact ctccgatctg
 360
 gggtggggag gggcgctgcg c
 381

<210> 506
 <211> 127
 <212> PRT
 <213> Homo sapiens

<400>	506
Val	His
1	5
Glu	Gln
20	25
Thr	Leu
35	40
Arg	Cys
50	55
Ser	Ala
65	70
Val	Glu
85	90
Ala	Leu

```

                100                105                110
Val Ile Ala Arg Leu Ser Asp Leu Gly Trp Gly Gly Ala Leu Arg
                115                120                125

<210> 507
<211> 499
<212> DNA
<213> Homo sapiens

<400> 507
gccggcggtgt tcaacctcat ggtgtggggc ttcattaccg acgtcatoga tgcccaggag
60
gtcatgtccg gggagcgtga agacgggtgc atctatggcg tgaactcctt cgcccagaaa
120
cttgcccagg ccattgccgg tggaatcggc ggagccatgc tgacgatgat cggctaccag
180
tcctctctccc aagtggtgct cgttcagtcg gagtcogtcg tcaatcacct gtacacgctc
240
gccaccgccca tcccgacgat ctgctgcctc ggcgctgccc tgctcatgct gggctaccgg
300
ctcaccgcgcg acaaggtggt cgccaacgcc gacgagttgg ctgctgccca cgcagtacag
360
gcgagcaaaa actcctgacc cataacggag gcacatcatg gacacgctca tcgagatcac
420
cgaccacttg acaacctcgc cgggtatcca attgaaaatt gacaagcgat ggggtgcctc
480
cgtcacattt gtgacgcgt
499

<210> 508
<211> 125
<212> PRT
<213> Homo sapiens

<400> 508
Ala Gly Val Phe Asn Leu Met Val Trp Ala Phe Ile Thr Asp Val Ile
1 5 10 15
Asp Ala Gln Glu Val Met Ser Gly Glu Arg Glu Asp Gly Val Ile Tyr
20 25 30
Gly Val Asn Ser Phe Ala Arg Lys Leu Ala Gln Ala Ile Ala Gly Gly
35 40 45
Ile Gly Gly Ala Met Leu Thr Met Ile Gly Tyr Gln Ser Ser Ser Gln
50 55 60
Gly Gly Ala Val Gln Ser Glu Ser Val Val Asn His Leu Tyr Thr Leu
65 70 75 80
Ala Thr Ala Ile Pro Thr Ile Cys Cys Leu Gly Ala Ala Leu Leu Met
85 90 95
Leu Gly Tyr Pro Leu Thr Arg Asp Lys Val Val Ala Asn Ala Asp Glu
100 105 110
Leu Ala Arg Arg His Ala Val Gln Ala Glu Gln Asn Ser
115 120 125

<210> 509
<211> 360

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<212> DNA

<213> Homo sapiens

<400> 509

ttggccatgg atttggtctg caagtctcagt cccaaagatg tcacgctcta tctaatggac
 60
 ttogggacca atggtgtggc accactaggc caattaccac aggtggccga caccttgctt
 120
 ttggatcata cggagaagat tgccaagttt gtacgcatca tggagcggga gctcaaccgg
 180
 cgtaagaagc tcttgtccga ctacggtggt ggtacactag agctctaccg tcagggtatg
 240
 ggtcagcaag agccggccat cgtcatcctg ctggacagtt atgagtccat gaaggaagag
 300
 gcctatgaag cggagctctt cagctcttg gtgcggatct cccgggaagg tctcagcatc
 360

<210> 510

<211> 120

<212> PRT

<213> Homo sapiens

<400> 510

Leu	Ala	Met	Asp	Leu	Ala	Arg	Lys	Phe	Ser	Pro	Lys	Asp	Val	Thr	Leu
1				5					10				15		
Tyr	Leu	Met	Asp	Phe	Gly	Thr	Asn	Gly	Val	Ala	Pro	Leu	Gly	Gln	Leu
			20				25					30			
Pro	Gln	Val	Ala	Asp	Thr	Leu	Leu	Leu	Asp	His	Thr	Glu	Lys	Ile	Ala
			35			40					45				
Lys	Phe	Val	Arg	Ile	Met	Glu	Arg	Glu	Leu	Asn	Arg	Arg	Lys	Lys	Leu
			50			55				60					
Leu	Ser	Asp	Tyr	Gly	Val	Gly	Thr	Leu	Glu	Leu	Tyr	Arg	Gln	Ala	Ser
65				70				75					80		
Gly	Gln	Gln	Glu	Pro	Ala	Ile	Val	Ile	Leu	Leu	Asp	Ser	Tyr	Glu	Ser
			85			90							95		
Met	Lys	Glu	Glu	Ala	Tyr	Glu	Ala	Glu	Leu	Phe	Thr	Leu	Leu	Val	Arg
			100			105						110			
Ile	Ser	Arg	Glu	Gly	Leu	Ser	Ile								
			115			120									

<210> 511

<211> 361

<212> DNA

<213> Homo sapiens

<400> 511

ntcgcgaacc gcggetatgc ggtgctccag cccaatttcc gcggatcggg cggttatggc
 60
 actgctgtcg gcgatgccgg catcggccag atcggggcca agatgcagga cgatctcgac
 120
 gacgggatgg actggctggt caaggagggc atcgtcgaca agggccgggt gtgcatcgtc
 180
 ggggctctct atggcggtta tgccgcgatg tggggcgaga tccgcaatcc cgaacgctat
 240

cgctgcgcgg cgagcctggc gggggttgcc gattaaggcc atgctcaaat ataaccggcg
 300
 ctatctcgac aaggaggcgg gcaagcgctg gccgccccgn tcaaccggcg aacccgaatt
 360
 c
 361

<210> 512
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 512
 Xaa Ala Asn Arg Gly Tyr Ala Val Leu Gln Pro Asn Phe Arg Gly Ser
 1 5 10 15
 Gly Gly Tyr Gly Thr Ala Phe Gly Asp Ala Gly Ile Gly Gln Ile Gly
 20 25 30
 Arg Lys Met Gln Asp Asp Leu Asp Asp Gly Met Asp Trp Leu Val Lys
 35 40 45
 Glu Gly Ile Val Asp Lys Gly Arg Val Cys Ile Val Gly Ala Ser Tyr
 50 55 60
 Gly Gly Tyr Ala Ala Met Trp Gly Ala Ile Arg Asn Pro Glu Arg Tyr
 65 70 75 80
 Arg Cys Ala Ala Ser Leu Ala Gly Val Ala Asp
 85 90

<210> 513
 <211> 369
 <212> DNA
 <213> Homo sapiens

<400> 513
 nnatgcagac tagaagatgg catgacgggt ttggctggcg gtttcgggct atgcggcatt
 60
 ccagaaaaat tgattcaaga gatcaaacga cgccagactt gtgatttgac catagttgtca
 120
 aataactctgt gtgtagatgg ttttggttta ggggttttgc tagaagataa gcaagtacgc
 180
 aaaatgggtgt cttcttatgt gggtgaaaaat gcactgtttg agaagcaatt attacaagggt
 240
 gagttggaag tcgagctcac tcctcaaggc actcttgccg aaaaactacg cgctggcgcc
 300
 gcgggaattc ctgccttttt cacagcaacg ggtgtaggta cacctattgg tgagggtaaa
 360
 gacacgcgt
 369

<210> 514
 <211> 123
 <212> PRT
 <213> Homo sapiens

<400> 514
 Xaa Cys Arg Leu Glu Asp Gly Met Thr Val Leu Ala Gly Gly Phe Gly

```

      1           5           10           15
Leu Cys Gly Ile Pro Glu Asn Leu Ile Gln Glu Ile Lys Arg Arg Gln
      20           25           30
Thr Cys Asp Leu Thr Ile Val Ser Asn Asn Cys Gly Val Asp Gly Phe
      35           40           45
Gly Leu Gly Val Leu Leu Glu Asp Lys Gln Val Arg Lys Met Val Ser
      50           55           60
Ser Tyr Val Gly Glu Asn Ala Leu Phe Glu Lys Gln Leu Leu Gln Gly
      65           70           75           80
Glu Leu Glu Val Glu Leu Thr Pro Gln Gly Thr Leu Ala Glu Lys Leu
      85           90           95
Arg Ala Gly Gly Ala Gly Ile Pro Ala Phe Phe Thr Ala Thr Gly Val
      100           105           110
Gly Thr Pro Ile Gly Glu Gly Lys Asp Thr Arg
      115           120

```

<210> 515

<211> 387

<212> DNA

<213> Homo sapiens

<400> 515

```

gcgtgggacg agaagggcgc cggcaactgc gcgatcgact acgggttcca ccagatcctc
60
tcgcacgtgc aggactcgtc gctgaccgcg atggacgagc tgaacaccca gggcgtgaca
120
tccttcaagc tcttcgtggc ctacaagggc gtcttctctc cggacgacgc gcgatcctcg
180
cgggcgttcc agaagggcgc cgacaacggc gcgatgatga tgaatgcacg cgagaacggc
240
gcgatcatcg acgtgctcgt gcagcaggcg ctgcaggccg ggaagaccac cccgtactac
300
cacggcatca gccggccgtg gcaggccgag gaggaggcca cccaccgcgc gatcatgatc
360
gccgacctga ccggtgcgcc gttgtac
387

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<210> 516

<211> 129

<212> PRT

<213> Homo sapiens

<400> 516

```

Ala Trp Asp Glu Lys Ala Ala Gly Asn Cys Ala Ile Asp Tyr Gly Phe
      1           5           10           15
His Gln Ile Leu Ser Asp Val Gln Asp Ser Ser Leu Thr Ala Met Asp
      20           25           30
Glu Leu Ile Thr Glu Gly Val Thr Ser Phe Lys Leu Phe Val Ala Tyr
      35           40           45
Lys Gly Val Phe Leu Ser Asp Asp Gly Gln Ile Leu Arg Ala Phe Gln
      50           55           60
Lys Gly Ala Asp Asn Gly Ala Met Met Met Met His Ala Glu Asn Gly
      65           70           75           80
Ala Ile Ile Asp Val Leu Val Gln Gln Ala Leu Glu Ala Gly Lys Thr

```

```

      85              90              95
Thr Pro Tyr Tyr His Gly Ile Ser Arg Pro Trp Gln Ala Glu Glu Glu
      100              105              110
Ala Thr His Arg Ala Ile Met Ile Ala Asp Leu Thr Gly Ala Pro Leu
      115              120              125
Tyr

```

```

<210> 517
<211> 377
<212> DNA
<213> Homo sapiens

```

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<400> 517
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<210> 518
<211> 118
<212> PRT
<213> Homo sapiens

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20      25      30
Ser Pro Gly Glu Ala Gln Gly Pro Leu Leu Pro Ser Pro Ala Arg Gly
35      40      45
Leu Lys Phe Leu Lys Leu Pro Pro Thr Ser Glu Lys Ser Pro Ser Pro
50      55      60
Gly Gly Pro Gln Leu Ser Pro Gln Leu Pro Arg Asn Ser Arg Ile Pro
65      70      75      80
Cys Arg Asn Ser Gly Ser Asp Gly Ser Pro Ser Pro Leu Leu Ala Arg
85      90      95
Arg Gly Leu Gly Gly Gly Glu Leu Ser Pro Glu Gly Ala Gln Gly Leu
100      105      110
Pro Thr Ser Pro Ser Arg
115

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<210> 519
<211> 311

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<212> DNA

<213> Homo sapiens

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<211> 92

<212> PRT

<213> Homo sapiens

<400> 520

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			20				25						30		
Asn	Phe	Leu	Gly	Lys	His	Asp	Leu	Pro	Lys	Leu	Thr	Leu	Glu	Lys	Asn
		35					40					45			
Arg	Tyr	Thr	Ser	Val	Thr	Thr	Glu	Val	Glu	Lys	Val	Val	Asn	Ile	Leu
		50				55					60				
Pro	Asn	Leu	Glu	Phe	Met	Ile	Glu	Phe	Phe	Glu	Ile	Tyr	Cys	Glu	Tyr
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<211> 352

<212> DNA

<213> Homo sapiens

<400> 521

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 aacgcggcgc tcgtgccggg ggtgcgcgaa tacgggtgcg tgggctgctc cggcgacttg
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 <211> 117
 <212> PRT
 <213> Homo sapiens

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 20 25 30
 Leu Val Arg Ser His Ala Ala Gly Thr Gly Pro Glu Val Glu Glu Glu
 35 40 45
 Val Ile Arg Ala Leu Met Leu Leu Arg Leu Ser Thr Leu Cys Thr Gly
 50 55 60
 Arg Thr Gly Val Arg Pro Val Val Val Glu Thr Tyr Ala Lys Ala Leu
 65 70 75 80
 Asn Ala Gly Ile Val Pro Gly Val Arg Glu Tyr Gly Ser Leu Gly Cys
 85 90 95
 Ser Gly Asp Leu Ala Pro Leu Ala His Cys Ala Leu Ala Leu Leu Gly
 100 105 110
 Glu Gly Glu Val Arg
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 <211> 693
 <212> DNA
 <213> Homo sapiens

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 <211> 193
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 <213> Homo sapiens

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 35 40 45
 Phe Pro Leu Asp Phe Gln Val Ile Leu Ala Gly Ser Gln Arg Phe Arg
 50 55 60
 Glu Lys Phe Pro Pro Val Phe Phe Ser Ser Phe Arg Asn Thr Val Gln
 65 70 75 80
 Ser Ser Asn Asn Lys Phe Arg Arg Asn Phe Thr Met Thr Tyr His Leu
 85 90 95
 Ser Pro Gly Asn Tyr Val Val Val Ala Gln Thr Arg Arg Lys Ser Ala
 100 105 110
 Glu Phe Leu Leu Arg Ile Phe Leu Lys Met Pro Asp Ser Asp Arg His
 115 120 125
 Leu Ser Ser His Phe Asn Leu Arg Met Lys Gly Ser Pro Ser Glu His
 130 135 140
 Gly Ser Gln Gln Ser Ile Phe Asn Arg Tyr Ala Gln Gln Arg Leu Asp
 145 150 155 160
 Ile Asp Ala Thr Gln Leu Gln Gly Leu Leu Asn Gln Glu Leu Leu Thr
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 Gly Pro Pro Gly Asp Met Phe Ser Leu Asp Gly Ala Ala Ala Trp Trp
 180 185 190
 Leu

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 <211> 1101
 <212> DNA
 <213> Homo sapiens

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<210> 526

<211> 290

<212> PRT

<213> Homo sapiens

<400> 526

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			20			25						30		
Gly	Asp	Gln	Ile	Leu	Asp	Trp	Gln	Tyr	Gly	Val	Thr	Gln	Ala	Phe
			35			40						45		
His	Thr	Glu	Glu	Val	Glu	Val	Asp	Ser	His	Ala	Tyr	Ser	His	Arg
			50			55				60				
Trp	Lys	Arg	Asn	Leu	Asp	Phe	Leu	Lys	Ala	Val	Asp	Thr	Asn	Arg
			65			70				75			80	
Ser	Val	Gly	Gln	Asp	Ser	Leu	Glu	Pro	Arg	Ser	Phe	Thr	Asp	Leu
			85			90							95	
Leu	Asp	Asp	Gly	Gln	Asp	Asn	Asn	Thr	Gln	Ile	Glu	Glu	Asp	Thr
			100			105							110	
His	Asn	Tyr	Tyr	Ile	Ser	Arg	Ile	Tyr	Gly	Pro	Ser	Asp	Ser	Ala
			115			120							125	
Arg	Asp	Leu	Trp	Val	Asn	Ile	Asp	Gln	Met	Glu	Lys	Asp	Lys	Val
			130			135						140		
Ile	His	Gly	Ile	Leu	Ser	Asn	Thr	His	Arg	Gln	Ala	Ala	Arg	Val
			145			150				155			160	
Leu	Ser	Phe	Asp	Phe	Pro	Phe	Tyr	Gly	His	Phe	Leu	Arg	Glu	Ile
			165			170							175	
Val	Ala	Thr	Gly	Gly	Phe	Ile	Tyr	Thr	Gly	Glu	Val	Val	His	Arg
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225      230      235      240
Gly Ser Phe Thr Phe Gln Ala Thr Leu Leu Met Asp Gly Arg Ile Ile
245      250      255
Phe Gly Tyr Lys Glu Ile Pro Val Leu Val Thr Gln Ile Ser Ser Thr
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<213> Homo sapiens

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<211> 886

<212> PRT

<213> Homo sapiens

<400> 528

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			20				25				30				
Leu	Glu	Ala	Cys	Asp	Glu	Ser	Pro	Ala	Ser	Arg	Glu	Leu	Asp	Ile	Pro
			35				40				45				
Leu	Pro	Glu	Asp	Ser	Glu	Thr	Ala	Tyr	Asp	Trp	Glu	Tyr	Ala	Gly	Phe

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Thr Pro Cys Thr Ala	Thr Cys Leu Gly Gly His Gln Glu Ala Ile Ala	
65	70	75
Val Cys Leu His Ile Gln Thr Gln Gln Thr Val Asn Asp Ser Leu Cys		80
	85	90
Asp Met Val His Arg Pro Pro Ala Met Ser Gln Ala Cys Asn Thr Glu		95
	100	105
Pro Cys Pro Pro Arg Trp His Val Gly Ser Trp Gly Pro Cys Ser Ala		110
	115	120
Thr Cys Gly Val Gly Ile Gln Thr Arg Asp Val Tyr Cys Leu His Pro		125
	130	135
Gly Glu Thr Pro Ala Pro Pro Glu Glu Cys Arg Asp Glu Lys Pro His		140
	145	150
Ala Leu Gln Ala Cys Asn Gln Phe Asp Cys Pro Pro Gly Trp His Ile		155
	165	170
Glu Glu Trp Gln Gln Cys Ser Arg Thr Cys Gly Gly Gly Thr Gln Asn		175
	180	185
Arg Arg Val Thr Cys Arg Gln Leu Leu Thr Asp Gly Ser Phe Leu Asn		190
	195	200
Leu Ser Asp Glu Leu Cys Gln Gly Pro Lys Ala Ser Ser His Lys Ser		205
	210	215
Cys Ala Arg Thr Asp Cys Pro Pro His Leu Ala Val Gly Asp Trp Ser		220
	225	230
Lys Cys Ser Val Ser Cys Gly Val Gly Ile Gln Arg Arg Lys Gln Val		235
	245	250
Cys Gln Arg Leu Ala Ala Lys Gly Arg Arg Ile Pro Leu Ser Glu Met		255
	260	265
Met Cys Arg Asp Leu Pro Gly Leu Pro Leu Val Arg Ser Cys Gln Met		270
	275	280
Pro Glu Cys Ser Lys Ile Lys Ser Glu Met Lys Thr Lys Leu Gly Glu		285
	290	295
Gln Gly Pro Gln Ile Leu Ser Val Gln Arg Val Tyr Ile Gln Thr Arg		300
	305	310
Glu Glu Lys Arg Ile Asn Leu Thr Ile Gly Ser Arg Ala Tyr Leu Leu		315
	325	330
Pro Asn Thr Ser Val Ile Ile Lys Cys Pro Val Arg Arg Phe Gln Lys		335
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Arg Leu Gly Ile Thr Lys Ser Gly Ser Leu Lys Ile His Gly Leu Ala		365
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Ala Pro Asp Ile Gly Val Tyr Arg Cys Ile Ala Gly Ser Ala Gln Glu		380
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Thr Val Val Leu Lys Leu Ile Gly Thr Asp Asn Arg Leu Ile Ala Arg		395
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Pro Ala Leu Arg Glu Pro Met Arg Glu Tyr Pro Gly Met Asp His Ser		415
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Glu Ala Asn Ser Leu Gly Val Thr Trp His Lys Met Arg Gln Met Trp		430
	435	440
Asn Asn Lys Asn Asp Leu Tyr Leu Asp Asp Asp His Ile Ser Asn Gln		445
	450	455
Pro Phe Leu Arg Ala Leu Leu Gly His Cys Ser Asn Ser Ala Gly Ser		460
	465	470
Thr Asn Ser Trp Glu Leu Lys Asn Lys Gln Phe Glu Ala Ala Val Lys		475
		480

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<210> 529

<211> 4566

<212> DNA

<213> Homo sapiens

<400> 529

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<210> 530

<211> 802

<212> PRT

<213> Homo sapiens

<400> 530

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Glu Leu Lys Arg Ala Gly Pro Arg Arg Arg Ala Ser Pro Glu Gly Cys
      35              40              45
Arg Ser Gly Gln Ala Ala Ala Ser Gln Ala Gly Gly Ala Arg Gly Asp
      50              55              60
Ala Arg Gly Ala Gln Leu Trp Pro Pro Gly Ser Asp Pro Asp Gly Gly
65              70              75              80
Pro Arg Asp Arg Asn Phe Leu Phe Val Gly Val Met Thr Ala Gln Lys
      85              90              95
Tyr Leu Gln Thr Arg Ala Val Ala Ala Tyr Arg Thr Trp Ser Lys Thr
      100              105              110
Ile Pro Gly Lys Val Gln Phe Phe Ser Ser Glu Gly Ser Asp Thr Ser
      115              120              125
Val Pro Ile Pro Val Val Pro Leu Arg Gly Val Asp Asp Ser Tyr Pro
      130              135              140
Pro Gln Lys Lys Ser Phe Met Met Leu Lys Tyr Met His Asp His Tyr
145              150              155              160
Leu Asp Lys Tyr Glu Trp Phe Met Arg Ala Asp Asp Val Tyr Ile
      165              170              175
Lys Gly Asp Arg Arg Leu Glu Asn Phe Leu Arg Ser Leu Asn Ser Ser Glu
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Pro Leu Phe Leu Gly Gln Thr Gly Leu Gly Thr Thr Glu Glu Met Gly
195              200              205
Lys Leu Ala Leu Glu Pro Gly Glu Asn Phe Cys Met Gly Gly Pro Gly
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225              230              235              240
Lys Cys Leu Arg Glu Met Tyr Thr Thr His Glu Asp Val Glu Val Gly
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Arg Cys Val Arg Arg Phe Ala Gly Val Gln Cys Val Trp Ser Tyr Glu
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      275              280              285
Ile Arg Asp Leu His Asn Ser Lys Ile His Gln Ala Ile Thr Leu His
290              295              300
Pro Asn Lys Asn Pro Pro Tyr Gln Tyr Arg Leu His Ser Tyr Met Leu
305              310              315              320
Ser Arg Lys Ile Ser Glu Leu Arg His Arg Thr Ile Gln Leu His Arg
      325              330              335
Glu Ile Val Leu Met Ser Lys Tyr Ser Asn Thr Glu Ile His Lys Glu
      340              345              350
Asp Leu Gln Leu Gly Ile Pro Pro Ser Phe Met Arg Phe Gln Pro Arg
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 Gln Phe Val Glu His Glu Glu Leu Asp Ala Gln Glu Leu Ala Lys Arg
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 Ile Asn Gln Glu Ser Gly Ser Leu Ser Phe Leu Ser Asn Ser Leu Lys
 500 505 510
 Lys Leu Val Pro Phe Gln Leu Pro Gly Ser Lys Ser Glu His Lys Glu
 515 520 525
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 Pro Asn Gln Asn Val Lys Leu Val Val Leu Leu Phe Asn Ser Asp Ser
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 Leu Gln Arg Cys Arg Ala Asn Thr Val Leu Gly Gln Gln Ile Tyr Phe
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 Pro Ile Ile Phe Ser Gln Tyr Asp Pro Lys Ile Val Tyr Ser Gly Lys
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 Arg Val Gly Gly Phe Asp Val Ser Ile Gln Gly Trp Gly Leu Glu Asp
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 Val Asp Leu Phe Asn Lys Val Val Gln Ala Gly Leu Lys Thr Phe Arg
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 Ser Gln Glu Val Gly Val Val His Val His His Pro Val Phe Cys Asp
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 Pro Asn Leu Asp Pro Lys Gln Tyr Lys Met Cys Leu Gly Ser Lys Ala
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 Ser Thr Tyr Gly Ser Thr Gln Gln Leu Ala Glu Met Trp Leu Glu Lys
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<210> 531

<211> 321

<212> DNA

<213> Homo sapiens

<400> 531

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<210> 532

<211> 96

<212> PRT

<213> Homo sapiens

<400> 532

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			20					25					30		
Ser	Val	Lys	Arg	Cys	Arg	Thr	Ser	Val	Ser	Asn	Ala	Pro	Glu	Val	Asn
			35					40					45		
Pro	Arg	Gly	Arg	Leu	Asn	Gln	Ala	Ser	Trp	Ala	Trp	Asp	Asp	Ser	Gly
			50			55					60				
Cys	Ser	Gly	Ser	Asn	Gly	Ala	Cys	Gly	Ser	Ala	Leu	Ile	Asp	Ser	Arg
65				70					75					80	
Gln	Ala	Pro	Ser	His	Ser	Ala	Trp	Pro	Ser	Phe	His	Thr	Cys	Trp	Cys
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<212> DNA

<213> Homo sapiens

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 35 40 45
 Lys Val Thr Leu Thr Asn Ile Asp Asn Val Leu Asn Lys Asp His Leu
 50 55 60
 Arg Trp Leu His Phe Leu Leu Glu Gly Arg Leu Glu Pro Asn Val Arg
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Met Thr Arg Pro Arg Arg Leu Leu Leu Gly Ser Ile Val Val Leu Gly
  65          70          75          80
Pro Leu Leu Val Ile Ser Pro Trp Ile Pro Arg Leu Ile Thr Glu Pro
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<212> DNA
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  35          40          45
Asp Ile Glu Asp Thr Gly Gly Ile Asp Arg Leu Phe Lys Leu Ile Glu
  50          55          60
Gln Arg Ala Gly His Trp Leu Ala Met Glu Val Glu Glu Thr Lys Ile
  65          70          75          80
Gln Leu Thr His Gln Asp Ser Arg His Val Pro Leu Asp Arg Ile Glu
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115

<210> 539

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<212> DNA

<213> Homo sapiens

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<210> 540

<211> 143

<212> PRT

<213> Homo sapiens

<400> 540

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 Ile Leu Lys Lys Asp His Gln Leu Leu Ala Ile Tyr Gly Lys Lys
 35 40 45
 Gly Asp Thr Ser Asn Ile Ile Thr Val Arg Val Ala Asp Gly Gln Thr
 50 55 60
 Val Gln Gly Glu Val Trp Lys Thr Thr Pro Tyr Gln Val Ala Ala Glu
 65 70 75 80
 Ile Ser Gln Glu Leu Ala Glu Ser Thr Val Ile Ala Lys Val Asn Gly
 85 90 95
 Glu Leu Trp Asp Leu Asp Arg Pro Leu Glu Gly Asp Ser Ser Leu Glu
 100 105 110
 Leu Leu Thr Phe Asp Asn Glu Glu Ala Gln Ala Val Ser Ile Leu Lys
 115 120 125
 Pro Asp Ser Gln Thr Leu Gly Ser Tyr Val Val Asn Tyr Ile Ile
 130 135 140

<210> 541

<211> 551

<212> DNA

<213> Homo sapiens

<400> 541

ggtaccgagc tgcgcgtgtg gtatcgggc ttctatgcc aagaatgga caagcccatg
 60
 ctgaagcagg ccggctctgg cgtccacgct gcaggcacc cagaaaacag cgccccctg
 120
 gaggcggagc ccagccagtg ggcgtgtaaa gtgtgtcttg ccacctctct ggagctgcag
 180
 ctccctcaatg gtaaggagga cgtgtgggga gcccagttg taaaactcct gtgtcgattt
 240
 ctctctgact tacgctgtca cctgtctgag gctgtcgggg gtgtcccgaga ctttgccttg
 300
 tctgccccat tgccccacaa tctagtcgcc agaaccaagg ctttctcagg gtttaaagct
 360
 tctgggcagt cccgcttccc acccccgaac cctgcaggcc tcaactctca ctctcctgg
 420
 ttgggaagtt gcatttcagc tgggcgcctt gactctggag cactggcagg ggccaggggc
 480
 caggagccag ccgtggcatg tgttgtgcac tcttgctttt gttgtctcta cttgacagcc
 540
 ccctcacgag t
 551

<210> 542

<211> 168

<212> PRT

<213> Homo sapiens

<400> 542

Met	Asp	Lys	Pro	Met	Leu	Lys	Gln	Ala	Gly	Ser	Gly	Val	His	Ala	Ala
1				5					10					15	
Gly	Thr	Pro	Glu	Asn	Ser	Ala	Pro	Val	Glu	Ser	Glu	Pro	Ser	Gln	Trp
			20					25					30		
Ala	Cys	Lys	Val	Cys	Ser	Ala	Thr	Phe	Leu	Glu	Leu	Gln	Leu	Leu	Asn
		35					40					45			
Gly	Lys	Glu	Asp	Val	Trp	Gly	Ala	Pro	Val	Val	Lys	Leu	Leu	Cys	Arg
		50				55				60					
Phe	Leu	Ser	Asp	Leu	Arg	Cys	His	Leu	Ser	Ala	Ala	Val	Gly	Gly	Val
65				70					75					80	
Pro	Asp	Phe	Val	Leu	Ser	Ala	Pro	Leu	Pro	His	Asn	Val	Val	Ala	Arg
			85					90					95		
Thr	Lys	Ala	Phe	Ser	Gly	Phe	Lys	Ala	Ser	Gly	Gln	Ser	Arg	Phe	Pro
		100					105						110		
Pro	Pro	Thr	Pro	Ala	Gly	Leu	Thr	Pro	His	Ser	Ser	Trp	Leu	Gly	Ser
		115					120					125			
Cys	Ile	Ser	Ala	Gly	Arg	Leu	Asp	Ser	Gly	Ala	Leu	Ala	Gly	Ala	Arg
		130				135					140				
Gly	Gln	Glu	Pro	Ala	Val	Ala	Cys	Val	Val	His	Ser	Cys	Leu	Cys	Cys
145				150						155					160
Leu	Tyr	Leu	Thr	Ala	Pro	Ser	Arg								
				165											

<210> 543
 <211> 349
 <212> DNA
 <213> Homo sapiens

<400> 543
 nnaaagccgg acatgaatac ccgcattgct ggcaaaactg tcttgacctt cattctggcc
 60
 gggggcaaaag gcagccgcct ggccccgatg accgatcagg tggccaaacc agccgtgccg
 120
 tttatgggga cgtaccgcct gattgaattt tcgctgtcca acattgtcca cagcggttg
 180
 caggacgtct ggatcattga gcaaaacctg ccccatagct taaacgagca cctggctggg
 240
 gggcgctcct gggatctgga ccgcacccgc ggtggcctga aggtcatgcc gcccttttcc
 300
 ggccttgcg atgaggacgg tggcttttcc gaaggcaacg cacacgcgt
 349

<210> 544
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 544
 Xaa Lys Pro Asp Met Asn Thr Arg Ile Ala Gly Lys Thr Val Leu Thr
 1 5 10 15
 Ile Ile Leu Ala Gly Gly Lys Gly Ser Arg Leu Ala Pro Met Thr Asp
 20 25 30
 Gln Val Ala Lys Pro Ala Val Pro Phe Met Gly Thr Tyr Arg Leu Ile
 35 40 45
 Asp Phe Ser Leu Ser Asn Ile Val His Ser Gly Leu Gln Asp Val Trp
 50 55 60
 Ile Ile Glu Gln Asn Leu Pro His Ser Leu Asn Glu His Leu Ala Gly
 65 70 75 80
 Gly Arg Ser Trp Asp Leu Asp Arg Thr Arg Gly Gly Leu Lys Val Met
 85 90 95
 Pro Pro Phe Ser Gly Pro Ala Asp Glu Asp Gly Gly Phe Ser Glu Gly
 100 105 110
 Asn Ala His Ala
 115

<210> 545
 <211> 390
 <212> DNA
 <213> Homo sapiens

<400> 545
 catgatgcaa aaacagacat gcttatttca aaatataaaa gtgaaaaaga tcgttttagca
 60
 caagaaattg ttggtgtcat cacaggttct gcaatgccgg gtggttcagc aaaccgtatc
 120
 ccaataaaag caggctcaaa tccagaaggt tetattgcaa ccgcttttat tgcagaaaaca
 180

atgtataacg aactcaaaac agtggattta actattcaaa atgctggcgg tgtacgcga
 240
 gatattttac cggggaatgt aacctttaac gatgettata ctttcttacc ttctgggaat
 300
 acgttatata cctataaaat ggaaggttca ttagtgaaac aagtgcctga agatgcaatg
 360
 ctatttgctt tgggtcccc ccccccccc
 390

<210> 546
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 546
 His Asp Ala Lys Thr Asp Met Leu Ile Ser Lys Tyr Lys Ser Glu Lys
 1 5 10 15
 Asp Arg Leu Ala Gln Glu Ile Val Gly Val Ile Thr Gly Ser Ala Met
 20 25 30
 Pro Gly Gly Ser Ala Asn Arg Ile Pro Asn Lys Ala Gly Ser Asn Pro
 35 40 45
 Glu Gly Ser Ile Ala Thr Arg Phe Ile Ala Glu Thr Met Tyr Asn Glu
 50 55 60
 Leu Lys Thr Val Asp Leu Thr Ile Gln Asn Ala Gly Gly Val Arg Ala
 65 70 75 80
 Asp Ile Leu Pro Gly Asn Val Thr Phe Asn Asp Ala Tyr Thr Phe Leu
 85 90 95
 Pro Phe Gly Asn Thr Leu Tyr Thr Tyr Lys Met Glu Ser Ser Leu Val
 100 105 110
 Lys Gln Val Leu Glu Asp Ala Met Leu Phe Ala Leu Gly Pro Pro Pro
 115 120 125
 Pro Pro
 130

<210> 547
 <211> 306
 <212> DNA
 <213> Homo sapiens

<400> 547
 aagcttggtt ttctgatttt tattcaaatc totatcatgg atgaagcatg cagtttcaga
 60
 catcgttcag tgttgacaac atatcaagat attctgcagt caatctcaat gtatgttcac
 120
 gaagcctcca acatatatttg tgggatacca tctttgtcag gcattgtgct aggcactgtc
 180
 cctgcagtga atagaaga caggatttct gtatttatgg ggcttagtac caagttgttc
 240
 tcaaaccttc atgtttgtgt atacaaatca gctgaggcct tcactaaact cnnnnccnn
 300
 nnnccnn
 306

<210> 548

<211> 90

<212> PRT

<213> Homo sapiens

<400> 548

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Met Asp Glu Ala Cys Ser Phe Arg Ile Ser Ser Val Leu Thr Thr Tyr
 1             5             10             15
Gln Asp Ile Leu Gln Ser Ile Ser Met Tyr Val His Glu Ala Ser Asn
           20             25             30
Ile Phe Cys Gly Ile Pro Ser Leu Ser Gly Ile Val Leu Gly Thr Val
           35             40             45
Pro Ala Val Asn Lys Lys Asp Arg Ile Ser Val Phe Met Gly Leu Ser
           50             55             60
Thr Lys Leu Phe Ser Asn Phe His Val Cys Val Tyr Lys Ser Ala Glu
65             70             75             80
Ala Phe Thr Lys Leu Xaa Xaa Xaa Xaa
           85             90

```

<210> 549

<211> 780

<212> DNA

<213> Homo sapiens

<400> 549

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nnacgcgtac ttccaacacc tatgctccag tatggaggac gggtaaagtc tcttgttaat
60
gttttaataca tacacatatt gtctgtaagt atgaagagaa aggcataatca gaaatatttc
120
aattcagcga ttgaaatgt ttactttctg tttattgaaa atttttgttc tttttcacca
180
tgttattttt ttctcctcgt gtagaatcgg acagtagcaa caccgagcca tggagtatgg
240
gacatgcgag ggaacaatt ccacacagga gtgaaatca aaatgtgggc tatcgcttgt
300
tttgccacac agaggcagtg cagagaagaa atattgaagg gtttcacaga ccagctgcgt
360
aagattttcta aggatgcagg gatgcccatc cagggccacg catgcttctg caaatatgca
420
caggggggcag acagcgtaga gcccatgttc cggcatctca agaacacata ttctggccta
480
cagcttatta tcgtcatcct gccggggaag acaccagtgt atgcggaagt gaaacgtgta
540
ggagacacac ttttgggtat ggctacacaa tgtgttcaag tcaagaatgt aataaaaaca
600
tctcctcaaa ctctgtcaaa cltgtgccta aagataaatg ttaaacctcg agggatcaat
660
aataattcttg tacctcatca aagaccttct gtgttcacag aaccagtgat ctttttggga
720
gccgatgtca ctcatccacc tgctgggtgat ggaagaagc cttctattgc tgctgttgta
780

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<210> 550

<211> 192

<212> PRT

<213> Homo sapiens

<400> 550

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Asn Arg Thr Val Ala Thr Pro Ser His Gly Val Trp Asp Met Arg Gly
 1           5           10           15
Lys Gln Phe His Thr Gly Val Glu Ile Lys Met Trp Ala Ile Ala Cys
      20           25           30
Phe Ala Thr Gln Arg Gln Cys Arg Glu Glu Ile Leu Lys Gly Phe Thr
      35           40           45
Asp Gln Leu Arg Lys Ile Ser Lys Asp Ala Gly Met Pro Ile Gln Gly
      50           55           60
Gln Pro Cys Phe Cys Lys Tyr Ala Gln Gly Ala Asp Ser Val Glu Pro
65           70           75           80
Met Phe Arg His Leu Lys Asn Thr Tyr Ser Gly Leu Gln Leu Ile Ile
      85           90           95
Val Ile Leu Pro Gly Lys Thr Pro Val Tyr Ala Glu Val Lys Arg Val
      100          105          110
Gly Asp Thr Leu Leu Gly Met Ala Thr Gln Cys Val Gln Val Lys Asn
      115          120          125
Val Ile Lys Thr Ser Pro Gln Thr Leu Ser Asn Leu Cys Leu Lys Ile
      130          135          140
Asn Val Lys Leu Gly Gly Ile Asn Asn Ile Leu Val Pro His Gln Arg
      145          150          155          160
Pro Ser Val Phe Gln Gln Pro Val Ile Phe Leu Gly Ala Asp Val Thr
      165          170          175
His Pro Pro Ala Gly Asp Gly Lys Lys Pro Ser Ile Ala Ala Val Val
      180          185          190

```

<210> 551

<211> 291

<212> DNA

<213> Homo sapiens

<400> 551

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nnggataccgg attatggggc tattgctaac aggtcaacgg ccatacaagg gctogttggc
60
gtggcaccgc cagcccccga gcctactcgc gagccaccga cgaactccgc tcttccgag
120
gaaccgtcct cgtcgtcaat cgcaccggtc cgcgcggccc cgaagactgc agtaccacag
180
actagttcgt cgtcggggcg ctgaccgatg cgcctatcgg cggggtcctc tgggtggcgc
240
tagcggggggc ttgatgtgcc ccataccaca gcgtccgcta aattgccnc c
291

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<210> 552

<211> 67

<212> PRT

<213> Homo sapiens

<400> 552

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Xaa Asp Pro Asp Tyr Gly Ala Ile Ala Asn Arg Ser Thr Ala Ile Lys
 1           5           10           15
Val Leu Val Ala Val Ala Pro Pro Ala Pro Glu Pro Thr Arg Glu Pro

```

```

                20                25                30
Pro Thr Asn Ser Ala Pro Ser Glu Glu Pro Ser Ser Ser Ile Ala
   35                40                45
Pro Val Pro Pro Ala Pro Thr Thr Ala Val Pro Thr Thr Ser Ser Ser
   50                55                60
Ser Gly Arg
65

<210> 553
<211> 471
<212> DNA
<213> Homo sapiens

<400> 553
ctagccgatg taggattagt aggttttccg agcgtgggta aatctacctt actctcaata
60
gtatctaaag ccaaaccgaa aattggtgca tatcatttca ctacaattaa acctaaccta
120
gggtgtgtgtt ccacaaaaga tcaacgtagt tttgttatgg cagatttacc aggtttaatt
180
gaaggtgcat ctgatggcgt tggattagga catcaatttt taagacatgt agagagaaca
240
aaagtatttg ttcacatgat tgatatgagc gggtctgaag gtagagaacc tattgaagat
300
tataaagtca ttaatcaaga attagctgcg tacgagcaac gtttagaaga tagacctcaa
360
atcgtagtag ctaacaagat ggatttacct gaatcacaa ataatttttaa cttgttttaa
420
gaagaaaattg gcgaagatgt gccagttatt ccagtttcaa caataacgcg t
471

<210> 554
<211> 157
<212> PRT
<213> Homo sapiens

<400> 554
Leu Ala Asp Val Gly Leu Val Gly Phe Pro Ser Val Gly Lys Ser Thr
  1                5                10                15
Leu Leu Ser Ile Val Ser Lys Ala Lys Pro Lys Ile Gly Ala Tyr His
 20                25                30
Phe Thr Thr Ile Lys Pro Asn Leu Gly Val Val Ser Thr Lys Asp Gln
 35                40                45
Arg Ser Phe Val Met Ala Asp Leu Pro Gly Leu Ile Glu Gly Ala Ser
 50                55                60
Asp Gly Val Gly Leu Gly His Gln Phe Leu Arg His Val Glu Arg Thr
 65                70                75                80
Lys Val Ile Val His Met Ile Asp Met Ser Gly Ser Glu Gly Arg Glu
 85                90                95
Pro Ile Glu Asp Tyr Lys Val Ile Asn Gln Glu Leu Ala Ala Tyr Glu
100                105                110
Gln Arg Leu Glu Asp Arg Pro Gln Ile Val Val Ala Asn Lys Met Asp
115                120                125
Leu Pro Glu Ser Gln Asp Asn Leu Asn Leu Phe Lys Glu Glu Ile Gly

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      130              135              140
Glu Asp Val Pro Val Ile Pro Val Ser Thr Ile Thr Arg
145              150              155

<210> 555
<211> 300
<212> DNA
<213> Homo sapiens

<400> 555
tctagagatt gagaacaatt atggatacag aaatggttga ttccgtcaaa tatattcgag
60
attcgggaatc atgtgaggct cgcgtgctgg agatcttagc cagaaggccg tccatgatgg
120
tgcagatctt gcgtggcgac ggcttaatta acgaagacca gagattatgc agattatggc
180
ttaataaagt acctagaatt gttcgctgc ttctccggct tagtgtgttc gtcgctgcgg
240
caataggtgc cgtgcggtta tgggcgggcg cttccggtaa tcccgatctt gtacacgcgt
300

<210> 556
<211> 93
<212> PRT
<213> Homo sapiens

<400> 556
Met Asp Thr Glu Met Val Asp Ser Val Lys Tyr Ile Arg Asp Ser Glu
1          5          10          15
Ser Cys Glu Ala Arg Val Leu Glu Ile Leu Ala Arg Arg Pro Ser Met
20         25         30
Met Val Gln Ile Leu Arg Gly Asp Gly Leu Ile Asn Glu Asp Gln Arg
35         40         45
Leu Val Arg Leu Trp Leu Asn Lys Val Pro Arg Ile Val Arg Leu Leu
50         55         60
Leu Arg Leu Ser Val Phe Val Ala Ala Ala Ile Gly Ala Arg Ala Val
65         70         75         80
Trp Ala Ala Ala Ser Gly Asn Pro Asp Leu Val His Ala
85          90

<210> 557
<211> 678
<212> DNA
<213> Homo sapiens

<400> 557
atcttccggg tttatgagga gaatgcgctg cgtgtcagat ttttcggcga cgaaattgag
60
gccttcacga cgatgcaccc gctcaccggg gaggtcatca gcgaggacga gcaggtctac
120
gtgttcccg gtacccacta tgcgcggcg ccggaacgta tggagcgggc catagcgctc
180
atccagcagg agctcgagga gcgcctggcc gttctagagc gtgatgggaa actgttgtag
240

```

gcccaacggg tacgtatgog tactacctac gatatcgaga tgatgcagca ggtcgggtgcc
 300
 tggctgggca tcgaaaacta ttccgggcac atcgacggac gcgctcccg ctcagccccg
 360
 aactgtctgc ttgactactt tccggaagat tttgtgctcg tcattgatga atccccagtg
 420
 accgtcccg agattggcgg gatgtatgag ggggacatga gccgcaagcg gacattggta
 480
 gaacatgggt tccgactgcc cagcgcgatg gacaaccgtc ctctcaaatt cgacgagttc
 540
 acccagcgga tcggccagac tgtctacctg tccgccacgc ccggttcgta cgagaccgaa
 600
 cgagctcacg gcgtcgtcga acaaatcatt cgtccgacag gtctggtgga tccggagatt
 660
 atcgtcaagc ctacgcgt
 678

<210> 558

<211> 226

<212> PRT

<213> Homo sapiens

<400> 558

Ile	Phe	Pro	Val	Tyr	Glu	Glu	Asn	Ala	Leu	Arg	Val	Glu	Phe	Phe	Gly
1				5					10				15		
Asp	Glu	Ile	Glu	Ala	Leu	Thr	Thr	Met	His	Pro	Leu	Thr	Gly	Glu	Val
			20					25					30		
Ile	Ser	Glu	Asp	Glu	Gln	Val	Tyr	Val	Phe	Pro	Ala	Thr	His	Tyr	Val
		35				40						45			
Ala	Gly	Pro	Glu	Arg	Met	Glu	Arg	Ala	Ile	Ala	Ser	Ile	Gln	Gln	Glu
		50				55					60				
Leu	Glu	Glu	Arg	Leu	Ala	Val	Leu	Glu	Arg	Asp	Gly	Lys	Leu	Leu	Glu
65				70					75				80		
Ala	Gln	Arg	Leu	Arg	Met	Arg	Thr	Thr	Tyr	Asp	Ile	Glu	Met	Met	Gln
				85					90				95		
Gln	Val	Gly	Ala	Cys	Ala	Gly	Ile	Glu	Asn	Tyr	Ser	Arg	His	Ile	Asp
			100			105							110		
Gly	Arg	Ala	Pro	Gly	Ser	Ala	Pro	Asn	Cys	Leu	Leu	Asp	Tyr	Phe	Pro
			115			120						125			
Glu	Asp	Phe	Val	Leu	Val	Ile	Asp	Glu	Ser	His	Val	Thr	Val	Pro	Gln
			130			135						140			
Ile	Gly	Gly	Met	Tyr	Glu	Gly	Asp	Met	Ser	Arg	Lys	Arg	Thr	Leu	Val
145				150						155				160	
Glu	His	Gly	Phe	Arg	Leu	Pro	Ser	Ala	Met	Asp	Asn	Arg	Pro	Leu	Lys
				165					170					175	
Phe	Asp	Glu	Phe	Thr	Gln	Arg	Ile	Gly	Gln	Thr	Val	Tyr	Leu	Ser	Ala
			180					185					190		
Thr	Pro	Gly	Ser	Tyr	Glu	Thr	Glu	Arg	Ala	His	Gly	Val	Val	Glu	Gln
			195			200						205			
Ile	Ile	Arg	Pro	Thr	Gly	Leu	Val	Asp	Pro	Glu	Ile	Ile	Val	Lys	Pro
			210			215						220			
Thr	Arg														
225															

<210> 559
 <211> 335
 <212> DNA
 <213> Homo sapiens

<400> 559
 ggatcctatg gagctcaagt tcaagaaaag aaactgtaaa catggagggt ttgtgataaa
 60
 tggaatgcag tcagaggga ggaactgccn gcttaaaagt tcctatgctg cgctttccag
 120
 agcaatacag tacacagtgg agggcgctac catggagtct ctgggtgaaa gtaggagtg
 180
 tatgggtggca ccagccaaac ttctcagggt tcataggcag acagcagctc tggagtggaa
 240
 ctaaagtgtg tccaggagct gaagccctta atcagctagg gctcacacag agtcaaggta
 300
 ggggtcaaaaa cattcagtct gggaccatat ctaga
 335

<210> 560
 <211> 92
 <212> PRT
 <213> Homo sapiens

<400> 560
 Met Glu Cys Ser Gln Arg Glu Gly Thr Ala Xaa Leu Lys Cys Pro Met
 1 5 10 15
 Leu Arg Phe Pro Glu Gln Tyr Ser Thr Gln Trp Arg Ala Leu Pro Trp
 20 25 30
 Ser Leu Trp Val Lys Val Arg Met Val Trp Trp His Gln Pro Asn Phe
 35 40 45
 Ser Gly Phe Ile Gly Arg Gln Gln Leu Trp Ser Gly Thr Lys Val Tyr
 50 55 60
 Pro Gly Ala Glu Ala Leu Asn Gln Leu Gly Leu Thr Gln Ser Gln Gly
 65 70 75 80
 Arg Val Lys Asn Ile Gln Ser Gly Thr Ile Ser Arg
 85 90

<210> 561
 <211> 477
 <212> DNA
 <213> Homo sapiens

<400> 561
 ngcgcgcccc ctctccgat ggcggcggag atccagccca agcctctgac ccgcaagccg
 60
 atcctgctgc agcggatgga ggggtcccag gaggtggtga atatggccgt gatcgtgccc
 120
 aaagaggagg gcgtcatcag cgtctccgag gacaggacag ttcgtgtttg gttaaagaga
 180
 gacatgggac agtattggcc aagcgtatgc catgcaatgc cttgagttta tattgtcaga
 240
 agattataac aagatgactc ctgtgaaaaa ctatcaagcg catcagagca gagtgaocag
 300

gacccgtgtt gtcctggagc tggagtgggt gctgagcaca ggacaggaca agcaatttgc
 360
 ctggcactgc tctgagagtg ggcagcgctt gggaggttat cggaccagtg ctgtggcctc
 420
 aggcctgcaa tttgatgttg aaaccggca tgtgtttatc ggtgaccact caggcca
 477

<210> 562
 <211> 74
 <212> PRT
 <213> Homo sapiens

<400> 562
 Xaa Ala Pro Pro Pro Met Ala Ala Glu Ile Gln Pro Lys Pro Leu
 1 5 10 15
 Thr Arg Lys Pro Ile Leu Leu Gln Arg Met Glu Gly Ser Gln Glu Val
 20 25 30
 Val Asn Met Ala Val Ile Val Pro Lys Glu Glu Gly Val Ile Ser Val
 35 40 45
 Ser Glu Asp Arg Thr Val Arg Val Trp Leu Lys Arg Asp Ser Gly Gln
 50 55 60
 Tyr Trp Pro Ser Val Tyr His Ala Met Pro
 65 70

<210> 563
 <211> 403
 <212> DNA
 <213> Homo sapiens

<400> 563
 ccatggcaga cagggagctg agcggcctgc ggaccagggt gcaccagagc atggtgcccc
 60
 tgctcctaca cctgaaggac caatgcccaa ctgtcgccac gggcaatgcc caccaccaaga
 120
 aaaggaaggg aaaaggcctc aaccttgccc agggctggaa cccacaggag gccagggtac
 180
 ggggcagacg gatggcagca gcactgcctg agagttgggg gagctccac ggggcagcaa
 240
 gtggcgggca gaggtctctg ccatctgcac tggtttctgt gaccacagtt ggcctgcccc
 300
 ctccccact gcaccactga cgaagcgaga cctgcctca aaaaaaaaaa caaaaacaaa
 360
 aacaaaaaca aaactcaaac ttacactgg agatctgtgc aat
 403

<210> 564
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 564
 Met Ala Asp Arg Glu Leu Ser Gly Leu Arg Thr Gln Val His Gln Ser
 1 5 10 15
 Met Val Pro Leu Leu Leu His Leu Lys Asp Gln Cys Pro Thr Val Ala

```

                20                25                30
Thr Gly Asn Ala His Pro Lys Lys Arg Lys Gly Lys Gly Leu Asn Leu
      35      40      45
Gly Gln Gly Trp Asn Pro Gln Glu Ala Arg Val Arg Gly Arg Arg Met
      50      55      60
Ala Ala Ala Leu Pro Glu Ser Trp Gly Ser Ser His Gly Ala Ala Ser
65      70      75      80
Gly Gly Gln Arg Val Trp Pro Ser Ala Leu Val Ser Val Thr Thr Val
      85      90      95
Gly Leu Pro Ala Pro Pro Leu His His
      100      105

```

<210> 565

<211> 311

<212> DNA

<213> Homo sapiens

<400> 565

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nctctccat ggagcagccc catcttccact cttcacctgg gccagggcct tccacagcag
60
ccaccaccca gcgaccacag agaggctgcg cggaggacac aggagagagg gagcccacgg
120
gcacgatctc caccggcttt cccagctccc tgggtcagcc ccacgggacc tctctctctc
180
tctcccatct ctccaagcca gccttgcata tagtaagagc tgtgatcagg atggaaagag
240
gcttgggccc cacagacctg gacaatgtcc cagtgggggc tggaggtgct agaagggcac
300
aggaggcccc n
311

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<210> 566

<211> 101

<212> PRT

<213> Homo sapiens

<400> 566

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Met Glu Gln Pro His Leu His Ser Ser Pro Gly Ala Arg Pro Ser Thr
  1      5      10      15
Ala Ala Thr Thr Gln Arg Pro Gln Arg Gly Cys Ala Glu Asp Thr Gly
      20      25      30
Glu Arg Glu Pro Thr Gly Thr Ile Ser Thr Gly Phe Pro Ser Ser Leu
      35      40      45
Gly Gln Pro His Gly Thr Ser Pro Pro Leu Ser His Ile Ser Lys Pro
      50      55      60
Ala Leu His Ile Val Arg Ala Val Ile Arg Met Glu Arg Gly Leu Gly
65      70      75      80
Arg Thr Asp Leu Asp Asn Val Pro Val Arg Ala Gly Gly Ala Arg Arg
      85      90      95
Ala Gln Glu Ala Pro
      100

```

<210> 567

<211> 929

<212> DNA

<213> Homo sapiens

<400> 567

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 120
 cctcgtcctc ggctccactc atggcggcaa gttccgctgc cagtccgggg atcctcgggg
 180
 catgggggat gatgagcagg ttatccacat cgctcgatgc ttctccgatg cgccagcgca
 240
 cgggtatcagt gccgcagtaa tagagggtc gcatagaattc gaccggacaa tccagttgga
 300
 ggcagtcacca ggtctggcgg gtgcgtaggg catcggagac cagagcatgt ccaacattgc
 360
 gcagctctaa acgcgtgcgc acctcacggg cctgacggcg ccccacgtcg gtgacgggac
 420
 gctcccgatc cccgcccggg gcatgggatg cgggctgtgc atgtctcatg aggaacagag
 480
 tgtgcatgga tccatcgttg cacttcgcgg tcgcccgggt tctacgatgt tggcatgccc
 540
 ttgacggatt tgggcattga tgaggcgcgt acctaccgcc cgaacgtccc tgaacccgat
 600
 gggttcgact ctttttgggc cgagacctc gatgagtatt ccggcgcttc ccaagatctg
 660
 acggcggtgc ctttcgataa cgtcaggct ctgatagata cctgggattt gtcgtgggtg
 720
 ggggtatcaca actctcgggt gagcgggtga ttacatgccc cagccgctgt gaacggccca
 780
 ttcccccttg tcatcgagta cctcgggtac tcgagttcgc gtggtgtgcc gattggatca
 840
 gtcttcgctg ctgctggcta tgcacatata gtcgtcgatc cacgtgtgtca ggggtggggc
 900
 caccacaact tgacggaaaa ctgtccgga
 929

<210> 568

<211> 71

<212> PRT

<213> Homo sapiens

<400> 568

Met Pro Leu Thr Asp Leu Gly Ile Asp Glu Ala Arg Thr Tyr Arg Pro
 1 5 10 15
 Asn Val Pro Glu Pro Asp Gly Phe Asp Ser Phe Trp Ala Glu Thr Leu
 20 25 30
 Asp Glu Tyr Ser Gly Val Pro Gln Asp Leu Thr Ala Val Pro Phe Asp
 35 40 45
 Asn Arg Gln Ala Leu Ile Asp Thr Trp Asp Leu Ser Trp Val Gly Tyr
 50 55 60
 His Asn Ser Arg Val Ser Gly
 65 70

<210> 569
 <211> 371
 <212> DNA
 <213> Homo sapiens

<400> 569
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 accatatacac tctcgattca gaattcgtag ttgatttagt ggcctttaac aaaacgctac
 120
 ctgtcgattca cttaatgggc gaaggaaagg aacttggtga ttcaaacatg gaagaactac
 180
 ctgaatgccc atattatcca aaagatcaaa agccaatcgt gattgggaaa aacacaaaac
 240
 tcaagggaaca accaacagcc gttgctctct tctcggatgt tgataaacgg ccagagatta
 300
 aatcaaaaat cttagaccgc tatgataatg atattgaaat ccgtacttgg ggcggtaactt
 360
 cccatgtcta n
 371

<210> 570
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 570
 Met Pro Asp Leu Asp Gly Lys Tyr His Ile Thr Leu Asp Ser Glu Phe
 1 5 10 15
 Val Leu Asp Leu Val Ala Phe Asn Lys Thr Leu Pro Val Asp Tyr Leu
 20 25 30
 Met Val Glu Gly Thr Glu Leu Val Tyr Ser Asn Met Glu Glu Leu Pro
 35 40 45
 Glu Cys Pro Tyr Tyr Pro Lys Asp Gln Lys Pro Ile Val Ile Gly Lys
 50 55 60
 Asn Thr Lys Leu Lys Glu Gln Pro Thr Ala Val Ala Leu Phe Ser Asp
 65 70 75 80
 Val Asp Lys Arg Pro Glu Ile Lys Ser Lys Ile Leu Asp Arg Tyr Asp
 85 90 95
 Asn Asp Ile Glu Ile Arg Thr Trp Gly Gly Thr Ser His Val Xaa
 100 105 110

<210> 571
 <211> 407
 <212> DNA
 <213> Homo sapiens

<400> 571
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 ccgggaccttg acggggccac gcacgaagag gccaaagacac tgaccgagac tactgtttcc
 120
 gtccccacct ccttcgccga cctcggcgctc cgagaagata tctgccaggc gctggaagg
 180

gtgggaattg tctccccgtt cccgatccag gccatgtcga tcccgattgc cgtcgagggc
 240
 acggatctta ttgggcaggc gcgtactggc actggcaaaa cactcgcctt cggcatcacc
 300
 attctgcagc gcatcacccct gcccggtgac gaaggttggg aagaactcac caccaaaggc
 360
 aagcccccaa gcactcgtga tgtgcccccta cccgggagct aggtcgg
 407

<210> 572

<211> 100

<212> PRT

<213> Homo sapiens

<400> 572

Leu Thr Glu Thr Thr Val Ser Val Pro Thr Ser Phe Ala Asp Leu Gly
 1 5 10 15
 Val Arg Glu Asp Ile Cys Gln Ala Leu Glu Gly Val Gly Ile Val Ser
 20 25 30
 Pro Phe Pro Ile Gln Ala Met Ser Ile Pro Ile Ala Val Glu Gly Thr
 35 40 45
 Asp Leu Ile Gly Gln Ala Arg Thr Gly Thr Gly Lys Thr Leu Ala Phe
 50 55 60
 Gly Ile Thr Ile Leu Gln Arg Ile Thr Leu Pro Gly Asp Glu Gly Trp
 65 70 75 80
 Glu Glu Leu Thr Thr Lys Gly Lys Pro Pro Ser Thr Arg Asp Val Pro
 85 90 95
 Leu Pro Gly Ser
 100

<210> 573

<211> 393

<212> DNA

<213> Homo sapiens

<400> 573

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 120
 tcgagggtgct cgaccacggc aagggatggc tcaccgaacc cgaattgtcc actgggcacc
 180
 ccaccccgga ggcagccgag gactttggcc gccgactggc tcacaccac gcagccgggg
 240
 cctcacacct gggggctgca cctgacgggt ttgttccga cgatgggtat atcggccgtg
 300
 ctccctgcc actgccgtcc gaaccaatct cctcctgggg agagttttac gctcagtgcc
 360
 gcatcgaaac atatatggac agtctcgacg ctg
 393

<210> 574

<211> 124

<212> PRT

<213> Homo sapiens

<400> 574

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Met Thr Phe Arg Lys Thr Asp His His Lys Asn Ala Ile Asp Tyr Glu
 1           5           10           15
Val Ala Gly Leu Met Trp Leu Ala Ala Arg Pro Asp Gly Ala Gly
          20           25           30
Ile Val Glu Val Leu Asp His Gly Lys Gly Trp Leu Thr Glu Pro Glu
          35           40           45
Leu Ser Thr Gly His Pro Thr Arg Glu Ala Ala Glu Asp Phe Gly Arg
          50           55           60
Arg Leu Ala His Thr His Ala Ala Gly Ala Ser His Leu Gly Ala Ala
          65           70           75           80
Pro Asp Gly Phe Val Pro Asp Asp Gly Tyr Ile Gly Arg Ala Pro Leu
          85           90           95
Pro Leu Pro Ser Glu Pro Ile Ser Ser Trp Gly Glu Phe Tyr Ala Gln
          100          105          110
Cys Arg Ile Glu Pro Tyr Met Asp Ser Leu Asp Ala
          115          120

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<210> 575

<211> 372

<212> DNA

<213> Homo sapiens

<400> 575

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nntatccatg cagacatggg accaggggtct ctgagggcag gaagcaaaagt ggggtagggg
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gatgggacaa gatgcccttg tgctaaggcc tctggagctg gagctggtta tagggatgat
 120
accaggcacc ctgagtcact cgcacctcac aatggggccg cttctggggg ccagtgggct
 180
tatggggctg gcaatgtgct gggttatgag gatggatcag aattccagg gcctcagggg
 240
actgggggtca gaacagccta tggagaaaagg tcaagggggcc ttgggcctag gagtacaggg
 300
ccaggggggtg aggcaggctt tagagatggt tcaggaggcc tccaaggaat gggatcagca
 360
gatggggccc gt
 372

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<210> 576

<211> 124

<212> PRT

<213> Homo sapiens

<400> 576

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Xaa Ile His Ala Asp Met Gly Pro Gly Ser Leu Arg Ala Gly Ser Lys
 1           5           10           15
Val Gly Glu Gly Asp Gly Thr Arg Cys Pro Gly Ala Lys Ala Ser Gly
          20           25           30
Ala Gly Ala Gly Tyr Arg Asp Asp Thr Arg His Pro Glu Ser Leu Ala
          35           40           45
Pro His Asn Gly Ala Ala Ser Gly Ser Gln Trp Ala Tyr Gly Ala Gly

```

```

      50              55              60
Asn Val Leu Gly Tyr Glu Asp Gly Ser Glu Leu Pro Gly Pro Gln Gly
65              70              75              80
Thr Gly Val Arg Thr Ala Tyr Gly Glu Arg Ser Arg Gly Leu Gly Pro
      85              90              95
Arg Ser Thr Gly Pro Gly Gly Glu Ala Gly Phe Arg Asp Gly Ser Gly
      100             105             110
Gly Leu Gln Gly Met Gly Ser Ala Asp Gly Pro Gly
      115             120

<210> 577
<211> 432
<212> DNA
<213> Homo sapiens

<400> 577
nagcgcaatg tcatgatgtc ggatttgta atgtoggatt tctcatccca gccatcaccc
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ccgcagcgcc gggcgcgga gaccagcggc cagcgccgtg aacagctcat cagcgtggcc
120
cgtcgcctct tcgcagacaa tggcatggca gggacctccg tcgaggagat cgccgctacc
180
gcgggaggtct ccaaaccggt catctacgag catttcgggt ccaaggatgg gctgtacgcc
240
gtcgtcgtag accgcgaggt acgccaccta caagattccc tcaacgccgc catgaccgcc
300
ccaaagcaag gcccgaaacg caccctggag tcagcggtag tggccctgct ggactacatc
360
gacgaccgtc cagacgggtt tcggatcatc tcgcgagact cctcgggtcgg ttcagccacc
420
ggttcgtacg cg
432

<210> 578
<211> 118
<212> PRT
<213> Homo sapiens

<400> 578
Met Thr Ser Gly Gln Arg Arg Glu Gln Leu Ile Ser Val Ala Arg Arg
1      5      10      15
Leu Phe Ala Asp Asn Gly Met Ala Gly Thr Ser Val Glu Glu Ile Ala
20     25     30
Ala Thr Ala Gly Val Ser Lys Pro Val Ile Tyr Glu His Phe Gly Ser
35     40     45
Lys Asp Gly Leu Tyr Ala Val Val Val Asp Arg Glu Val Arg His Leu
50     55     60
Gln Asp Ser Leu Asn Ala Ala Met Thr Arg Pro Lys Gln Gly Pro Lys
65     70     75     80
Arg Thr Leu Glu Ser Ala Val Leu Ala Leu Leu Asp Tyr Ile Asp Asp
85     90     95
Arg Pro Asp Gly Phe Arg Ile Ile Ser Arg Asp Ser Ser Val Gly Ser
100    105    110
Ala Thr Gly Ser Tyr Ala

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115

<210> 579
 <211> 320
 <212> DNA
 <213> Homo sapiens

<400> 579
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 60
 ctgctcccgag ggatcaccac cttaccacagc gggccacctg ctcccccggt ccccgggcg
 120
 cccggccccct ggtcgcgag acccctcttc agcctgaagc tgctccgacac agaggacgtc
 180
 tttctctgcc gcgcggggccc gctcgaggtc ccggccgaca gccgctgtt cgtgcaggcg
 240
 gccttggccc gtccctcccc gcgctggggc ctggccctgc accgctgctc agtgacgccg
 300
 tcctcacgcc cgccccggg
 320

<210> 580
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 580
 Met Leu Gly Thr Val Leu Leu Leu Ala Leu Leu Pro Gly Ile Thr Thr
 1 5 10 15
 Leu Pro Ser Gly Pro Pro Ala Pro Phe Pro Ala Ala Pro Gly Pro
 20 25 30
 Trp Leu Arg Arg Pro Leu Phe Ser Leu Lys Leu Ser Asp Thr Glu Asp
 35 40 45
 Val Phe Pro Arg Arg Ala Gly Pro Leu Glu Val Pro Ala Asp Ser Arg
 50 55 60
 Val Phe Val Gln Ala Ala Leu Ala Arg Pro Ser Pro Arg Trp Gly Leu
 65 70 75 80
 Ala Leu His Arg Cys Ser Val Thr Pro Ser Ser Arg Pro Ala Pro
 85 90 95

<210> 581
 <211> 419
 <212> DNA
 <213> Homo sapiens

<400> 581
 nacgacggca accattcgct gtggaaggag ctgaacggcc agctcgacgt gcagtttttc
 60
 cagctcgcca tgggcttcaa gacgccagta cgcattgaca gcgtcgaccc caagaccgc
 120
 gaagcccgcg aggtgcatct ccgcccctcg ctgtttcaact atgccaagac cagcgtggac
 180
 accaagcagc tgaccggcga cctgggtttc tccggtttca agctgtttca ggcgccggaa
 240

ctggatgcgc atgacgtgct gtcgtttctc ggccagctt acttcgtgc ggtggacgca
 300
 accgccagct acggcctctc cgcacgcggc ctggcgattg atacctacgc gaaaaaacgc
 360
 gaggaattcc ccgacttcac gcagttctgg ttcgaaaccc cgagcaagga cccacgcgt
 419

<210> 582
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 582
 Xaa Asp Gly Asn His Ser Leu Trp Lys Glu Leu Asn Gly Gln Leu Asp
 1 5 10 15
 Val Gln Phe Phe His Val Gly Met Gly Phe Lys Thr Pro Val Arg Met
 20 25 30
 His Ser Val Asp Pro Lys Thr Arg Glu Ala Arg Glu Val His Phe Arg
 35 40 45
 Pro Ser Leu Phe Asn Tyr Ala Lys Thr Thr Val Asp Thr Lys Gln Leu
 50 55 60
 Thr Gly Asp Leu Gly Phe Ser Gly Phe Lys Leu Phe Lys Ala Pro Glu
 65 70 75 80
 Leu Asp Arg His Asp Val Leu Ser Phe Leu Gly Ala Ser Tyr Phe Arg
 85 90 95
 Ala Val Asp Ala Thr Arg Gln Tyr Gly Leu Ser Ala Arg Gly Leu Ala
 100 105 110
 Ile Asp Thr Tyr Ala Lys Lys Arg Glu Glu Phe Pro Asp Phe Thr Gln
 115 120 125
 Phe Trp Phe Glu Thr Pro Ser Lys Asp Pro Arg
 130 135

<210> 583
 <211> 407
 <212> DNA
 <213> Homo sapiens

<400> 583
 cttttgatca atgctgatgg cacgaagcta tcgaaaaggt cgggtgatgt ccgcgtagct
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 gattatatgg agcagggatg ggagccggag acgctggtga acctagtgtc cctcacgggc
 120
 tatagctatg cgaatttggg gcatgctgat catgatgtca agacgatgaa cgaactcatt
 180
 cgtgactttg agcttactcg tatctcccat acgcgagcca cactcccat ggacaagctt
 240
 gtgtttttga acaagcatca cttgacaaat aagctggcgc tcgccacgac gtgtgagcag
 300
 accaaacaag acctattgtc gcgtatccgg ccgatcacta cctcgtggta cggcgattat
 360
 tcagatgatt atatcctgcg cgtcgtaaca ctgggacccc aacgcgt
 407

<210> 584

<211> 135

<212> PRT

<213> Homo sapiens

<400> 584

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Leu Leu Ile Asn Ala Asp Gly Thr Lys Leu Ser Lys Arg Ser Gly Asp
 1             5             10             15
Val Arg Val Ala Asp Tyr Met Glu Gln Gly Trp Glu Pro Glu Thr Leu
 20             25             30
Val Asn Leu Val Ala Leu Thr Gly Tyr Ser Tyr Ala Asn Leu Glu His
 35             40             45
Ala Asp His Asp Val Lys Thr Met Asn Glu Leu Ile Arg Asp Phe Glu
 50             55             60
Leu Thr Arg Ile Ser His Thr Arg Ala Thr Leu Pro Met Asp Lys Leu
 65             70             75
Val Phe Leu Asn Lys His His Leu Thr Asn Lys Leu Ala Leu Ala Thr
 85             90             95
Thr Cys Glu Gln Thr Lys Gln Asp Leu Leu Ser Arg Ile Arg Pro Ile
100            105            110
Thr Thr Ser Trp Tyr Gly Asp Tyr Ser Asp Asp Tyr Ile Leu Arg Val
115            120            125
Val Thr Leu Gly Pro Gln Arg
130            135

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<210> 585

<211> 502

<212> DNA

<213> Homo sapiens

<400> 585

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nnacgcgtcc tcgctggata tgaggctgtg aagagggaac gctgcgtcat tgatctggac
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gatattttgt tgtgcgcggt gggattgttg gttcagcacc gtgacatcac tgaggagatt
120
cgggctcggt accgacattt cgttgtcgac gaataccagg acgtttctcc gctcgagcat
180
aggttgcttg aactgtggtt tggcgatcga aatgatgtat gcgtcgtggg agatccgcac
240
caggccattc actcttatgc aggcgcacga gctgactacc tcctcgactt cgttgccgat
300
catctcggcg ctaaacgcac cgatttggtt cgcaactacc gctccactcc cgagatcggt
360
cagttggcca atgaagttct tgtcaacogt atgactccag aggaggcttt ggaacatggc
420
aggggagtc aattggtttc gcggggtoga tccggtcccg agcccatcta tcaggctctc
480
ggggacgatg cctccgaagc tt
502

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<210> 586

<211> 167

<212> PRT

<213> Homo sapiens

<400> 586

Xaa Arg Val Leu Ala Gly Tyr Glu Ala Val Lys Arg Glu Arg Cys Val
 1 5 10 15
 Ile Asp Leu Asp Asp Ile Leu Leu Cys Ala Val Gly Leu Leu Val Gln
 20 25 30
 His Arg Asp Ile Thr Glu Glu Ile Arg Ala Arg Tyr Arg His Phe Val
 35 40 45
 Val Asp Glu Tyr Gln Asp Val Ser Pro Leu Gln His Arg Leu Leu Glu
 50 55 60
 Leu Trp Phe Gly Asp Arg Asn Asp Val Cys Val Val Gly Asp Pro His
 65 70 75 80
 Gln Ala Ile His Ser Tyr Ala Gly Ala Arg Ala Asp Tyr Leu Leu Asp
 85 90 95
 Phe Val Ala Asp His Pro Gly Ala Lys Arg Ile Asp Leu Val Arg Asn
 100 105 110
 Tyr Arg Ser Thr Pro Glu Ile Val Gln Leu Ala Asn Glu Val Leu Val
 115 120 125
 Asn Arg Met Thr Pro Glu Glu Ala Leu Glu His Gly Arg Gly Val Thr
 130 135 140
 Leu Val Ser Arg Gly Arg Ser Gly Pro Glu Pro Ile Tyr Gln Ala Leu
 145 150 155 160
 Gly Asp Asp Ala Ser Glu Ala
 165

<210> 587

<211> 746

<212> DNA

<213> Homo sapiens

<400> 587

gcgtccctgcc tcgagggcct cgggagcttc cgctgcctct gttggccagg ctacagcggc
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 gagctgtgcg aggtggacga ggacgagtg gcatcgagcc cctgccagca tgggggccga
 120
 tgctgcagc gctctgaccc ggccctctac ggggggtgtcc aggcgcgctt ccctggcgcc
 180
 ttcagcttcc gccatgctgc ggggttccctg tgccactgcc etcctggctt tgagggagcc
 240
 gactgcgggtg tggaggtgga cgagtgtgcc tcacggccat gcctcaatgg aggccactgc
 300
 caggacctgc ccaatggctt ccagtgtcac tgcccagatg gctacgcagg gccgacatgt
 360
 gaggaagatg tggatgaatg cctgtccgat ccttgctgc acggcggaac ctgcagtgc
 420
 actgtggcag gctatatctg caggtgccca gagacctggg gtgggcgcga ctgtctctgtg
 480
 cagctcactg gctgccaggg ccacacctgc ccgctggctg ccacctgcat ccctatcttc
 540
 gagctctgggg tccacagtta cgtctgcca tgcccacctg gtacccatgg accgttctgt
 600
 ggccagaata ccacctcttc tgtgatggct gggagcccca ttacggcatc agtcccagct
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 720

actcgcaatg acaccaagga aagctt
746

<210> 588
<211> 248
<212> PRT
<213> Homo sapiens

<400> 588
Ala Ser Cys Leu Glu Gly Leu Gly Ser Phe Arg Cys Leu Cys Trp Pro
1 5 10 15
Gly Tyr Ser Gly Glu Leu Cys Glu Val Asp Glu Asp Glu Cys Ala Ser
20 25 30
Ser Pro Cys Gln His Gly Gly Arg Cys Leu Gln Arg Ser Asp Pro Ala
35 40 45
Leu Tyr Gly Gly Val Gln Ala Ala Phe Pro Gly Ala Phe Ser Phe Arg
50 55 60
His Ala Ala Gly Phe Leu Cys His Cys Pro Pro Gly Phe Glu Gly Ala
65 70 75 80
Asp Cys Gly Val Glu Val Asp Glu Cys Ala Ser Arg Pro Cys Leu Asn
85 90 95
Gly Gly His Cys Gln Asp Leu Pro Asn Gly Phe Gln Cys His Cys Pro
100 105 110
Asp Gly Tyr Ala Gly Pro Thr Cys Glu Asp Val Asp Glu Cys Leu
115 120 125
Ser Asp Pro Cys Leu His Gly Gly Thr Cys Ser Asp Thr Val Ala Gly
130 135 140
Tyr Ile Cys Arg Cys Pro Glu Thr Trp Gly Gly Arg Asp Cys Ser Val
145 150 155 160
Gln Leu Thr Gly Cys Gln Gly His Thr Cys Pro Leu Ala Ala Thr Cys
165 170 175
Ile Pro Ile Phe Glu Ser Gly Val His Ser Tyr Val Cys His Cys Pro
180 185 190
Pro Gly Thr His Gly Pro Phe Cys Gly Gln Asn Thr Thr Phe Ser Val
195 200 205
Met Ala Gly Ser Pro Ile Gln Ala Ser Val Pro Ala Gly Gly Pro Leu
210 215 220
Gly Leu Ala Leu Arg Phe Arg Thr Thr Leu Pro Ala Gly Thr Leu Ala
225 230 235 240
Thr Arg Asn Asp Thr Lys Glu Ser
245

<210> 589
<211> 381
<212> DNA
<213> Homo sapiens

<400> 589
atctcacaag tacaattaca gtctcaagaa ctgagctatc agcaaaagca aggtcttcag
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ccagtacctc tgcaagccac tatgagtgtc gcaactggta tccagccatc gectgtataat
120
gtggttgggtg taacttcagc tttaggtcag cagccttcca ttccagttt ggctcaaccc
180

cagctaccat attctcaggc ggctcctcca gtgcaaaactc cccttccagg ggcaccacca
 240
 ccccaacagt tacagtatgg acaacagcaa ccaatggttt ctacacagat ggcaccaggc
 300
 catgtcaaat cagtgactca aaatcctgct tcagagtatg tacaacagca gcccaattctt
 360
 caaacagcaa tgcctccgg a
 381

<210> 590
 <211> 127
 <212> PRT
 <213> Homo sapiens

<400> 590
 Ile Ser Gln Val Gln Leu Gln Ser Gln Glu Leu Ser Tyr Gln Gln Lys
 1 5 10 15
 Gln Gly Leu Gln Pro Val Pro Leu Gln Ala Thr Met Ser Ala Ala Thr
 20 25 30
 Gly Ile Gln Pro Ser Pro Val Asn Val Val Gly Val Thr Ser Ala Leu
 35 40 45
 Gly Gln Gln Pro Ser Ile Ser Ser Leu Ala Gln Pro Gln Leu Pro Tyr
 50 55 60
 Ser Gln Ala Ala Pro Pro Val Gln Thr Pro Leu Pro Gly Ala Pro Pro
 65 70 75 80
 Pro Gln Gln Leu Gln Tyr Gly Gln Gln Gln Pro Met Val Ser Thr Gln
 85 90 95
 Met Ala Pro Gly His Val Lys Ser Val Thr Gln Asn Pro Ala Ser Glu
 100 105 110
 Tyr Val Gln Gln Gln Pro Ile Leu Gln Thr Ala Met Ser Ser Gly
 115 120 125

<210> 591
 <211> 684
 <212> DNA
 <213> Homo sapiens

<400> 591
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 aagcaggaat acaagcgca gtcgttcacc ctgttctccg agctgctgga ctcgatcaag
 120
 cgcgattcga ttccgggtcct cttccacgtc cagggggccgg gggaaaaaatc cgtatcgaaa
 180
 naaaaagcgc gcctgcgtca ggaagccgaa gccctggccc agcgcatgca gttcagcac
 240
 gctgaagccc caggcctgga cgcgcccggaa atcctcgggtg aagaagtcca tgctgccttg
 300
 gccaccgcgc cggtacgcaa cgagcagaag ctggggccgta acgaactgtg ctactgcggt
 360
 tcgggcaaga agtacaagca ctgccacggt cagatcagct aaggctctta ccgatactg
 420
 aaataactgc gccgcgaccg gcattagccg tcgcggcggtt ttccatttg aaacactgcc
 480

cttgtgacgg cagtcagat atcacattaa aaggagggca ttcatgggtg ttggttctgg
 540
 gtccttggcc tacgttgcaac ccggttgccg gttttgaact cggatcgcgc tggcgccgta
 600
 tcaagcgccc tgggcgcaag gatgtggtgg cgatgcgctg cgccgaaggt tccacggtgg
 660
 cgggggtggt taccctcaac gcgt
 684

<210> 592
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 592
 Ser Thr Met Asp His Leu Arg His Gly Ile His Leu Arg Gly Tyr Ala
 1 5 10 15
 Gln Lys Asn Pro Lys Gln Glu Tyr Lys Arg Glu Ser Phe Thr Leu Phe
 20 25 30
 Ser Glu Leu Leu Asp Ser Ile Lys Arg Asp Ser Ile Arg Val Leu Phe
 35 40 45
 His Val Gln Gly Pro Gly Glu Lys Ser Val Ser Lys Xaa Lys Ala Arg
 50 55 60
 Leu Arg Gln Glu Ala Glu Ala Leu Ala Gln Arg Met Gln Phe Glu His
 65 70 75 80
 Ala Glu Ala Pro Gly Leu Asp Ala Pro Glu Ile Leu Gly Glu Glu Val
 85 90 95
 Asp Val Ala Leu Ala Thr Ala Pro Val Arg Asn Glu Gln Lys Leu Gly
 100 105 110
 Arg Asn Glu Leu Cys Tyr Cys Gly Ser Gly Lys Lys Tyr Lys His Cys
 115 120 125
 His Gly Gln Ile Ser
 130

<210> 593
 <211> 615
 <212> DNA
 <213> Homo sapiens

<400> 593
 nnacgcgtgc agaccgcgc gagtctcgct ccggtgcgga tagcgtagg ctcccaaac
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 120
 gataccatcc ccgcgcgcgt aggccagcca cgatggctga cgccaccat ccagacccca
 180
 gtcatacctc ctacacgtgg tcgattcgtg atcgccccg tcatgatgcg caccatcgac
 240
 ccgttttgca tggcccgcca tcacaccgat ctcgggtcagg ttgccgaagt cattgtcacg
 300
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<210> 594
 <211> 205
 <212> PRT
 <213> Homo sapiens

<400> 594
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 35 40 45
 Gln Pro Arg Trp Ser Thr Ala Thr Ile Gln Thr Pro Val Ile Pro Thr
 50 55 60
 Thr Arg Gly Arg Phe Val Ile Gly Pro Val Met Met Arg Thr Ile Asp
 65 70 75 80
 Pro Phe Gly Met Ala Arg His His Thr Asp Leu Gly Gln Val Ala Glu
 85 90 95
 Val Ile Val Thr Pro Arg Ile Val Asp Leu Gly Ala Ser Gly Glu Leu
 100 105 110
 Gly Gly Gln Gly Phe Asp Thr Arg Ser Ser Ala Ile His Ala Gly Arg
 115 120 125
 Arg Gly Pro Asp Asp Ala Met Val Arg Asp Trp His Thr Gly Asp Ser
 130 135 140
 Val Arg Arg Ile His Trp Arg Ser Thr Ala His Arg Gly Asp Leu Met
 145 150 155 160
 Val Arg Cys Glu Glu Gln Ala Trp Asn Pro Ser Val Val Ile Val Leu
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 180 185 190
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 195 200 205

<210> 595
 <211> 303
 <212> DNA
 <213> Homo sapiens

<400> 595
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<210> 596
 <211> 88
 <212> PRT
 <213> Homo sapiens

<400> 596
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 35 40 45
 Ser Ala Leu Arg Ser Pro Glu Gln Gly Ser Glu Lys Cys Pro Ser Gln
 50 55 60
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 Asp Gln Gly Pro Arg Asp Leu Val
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<210> 597
 <211> 2709
 <212> DNA
 <213> Homo sapiens

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780
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1740
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1860
cgagattttc cgggtgaatac gggactgcac gtactctctc atcatgaaaa cagagccccg
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1980
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<210> 598

<211> 240

<212> PRT

<213> Homo sapiens

<400> 598

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			20				25						30		
Glu	Cys	Gly	Lys	Ser	Phe	Gly	Asp	Leu	Val	Ser	Arg	Arg	Lys	His	Met
			35				40					45			
Arg	Ile	His	Ile	Val	Lys	Lys	Pro	Val	Glu	Cys	Arg	Gln	Cys	Gly	Lys
			50			55					60				
Thr	Phe	Arg	Asn	Gln	Ser	Ile	Leu	Lys	Thr	His	Met	Asn	Ser	His	Thr
65					70					75				80	
Gly	Glu	Lys	Pro	Tyr	Gly	Cys	Asp	Leu	Cys	Gly	Lys	Ala	Phe	Ser	Ala
			85				90						95		
Ser	Ser	Asn	Leu	Thr	Ala	His	Arg	Lys	Ile	His	Thr	Gln	Glu	Arg	Arg
			100				105						110		
Tyr	Glu	Cys	Ala	Ala	Cys	Gly	Lys	Val	Phe	Gly	Asp	Tyr	Leu	Ser	Arg
			115				120					125			
Arg	Arg	His	Met	Ser	Val	His	Leu	Val	Lys	Lys	Arg	Val	Glu	Cys	Arg
			130				135				140				
His	Cys	Gly	Lys	Ala	Phe	Arg	Asn	Gln	Ser	Thr	Leu	Lys	Thr	His	Met
145					150					155				160	
Arg	Ser	His	Thr	Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Asp	His	Cys	Gly	Lys
			165						170					175	
Ala	Phe	Ser	Ile	Gly	Ser	Asn	Leu	Asn	Val	His	Arg	Arg	Ile	His	Thr
			180				185						190		
Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Leu	Val	Cys	Gly	Lys	Ala	Phe	Ser	Asp
			195				200					205			
His	Ser	Ser	Leu	Arg	Ser	His	Val	Lys	Thr	His	Arg	Gly	Glu	Lys	Leu
			210			215				220					
Phe	Xaa	Cys	His	Pro	Cys	Gly	Lys	Gly	Ser	Ser	Glu	Arg	Ala	Xaa	Leu
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<210> 599
 <211> 340
 <212> DNA
 <213> Homo sapiens

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 caggcatggt tgccgggccc catcccttgc acttgacgtc cgtggcctat cggccgaggg
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 240
 tggggctcgt cggaggacga ggatgtgagt gccgatggct ttgcgcgact gggcgtattc
 300
 caccggcgga ttggtgctcca gatcgtccag gccatgatca
 340

<210> 600
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 600
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 Arg Ala Lys Pro Ser Pro Leu Thr Ser Ser Ser Asp Glu Pro His
 20 25 30
 Ser Leu Pro Thr Arg Ser Ser Arg Gly Thr Pro Thr His Gly Ser Asn
 35 40 45
 Cys Arg Pro Ala Pro Arg Pro Ile Gly His Gly Leu Gln Val Gln Gly
 50 55 60
 Met Arg Pro Gly Lys His Ala Trp Ala Lys Arg Cys Arg Leu Arg Cys
 65 70 75
 Thr Ala Thr Pro Ser Thr Cys Ala Met Thr Pro Asn Lys Arg Ser Asp
 80 85 90 95
 Thr Thr Glu Arg Ser His His Asp Val Lys Ser Arg Glu Ala Arg
 100 105 110

<210> 601
 <211> 421
 <212> DNA
 <213> Homo sapiens

<400> 601
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 ccgcgctcca ccatcttgat ggacggcgct ccgctggcgc tcgcgcctta cggccagcgc
 120
 cagctgtcga tggccccgct gtctatcggt aatctgcaat cggctggacgt ggtgcggcgc
 180
 gccggcgccg tgccgtacgg gccgcagaac gtcggcgccg tgatcaactt cggtaccgca
 240

gacattccca aaacgttttg cggtgccgcc agcgtacaaa ccagggtgc cagccacggc
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 ggctgaaga ccttgaccag cgctccgtg ggcgccaccg cagacaacgg cctggcgccg
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 421

<210> 602
 <211> 140
 <212> PRT
 <213> Homo sapiens

<400> 602
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 Ser Arg Leu Ser Pro Arg Ser Thr Ile Leu Met Asp Gly Val Pro Leu
 20 25 30
 Ala Val Ala Pro Tyr Gly Gln Pro Gln Leu Ser Met Ala Pro Leu Ser
 35 40 45
 Ile Gly Asn Leu Gln Ser Val Asp Val Val Arg Gly Gly Gly Ala Val
 50 55 60
 Arg Tyr Gly Pro Gln Asn Val Gly Gly Val Ile Asn Phe Val Thr Arg
 65 70 75 80
 Asp Ile Pro Lys Thr Phe Gly Gly Ala Ala Ser Val Gln Thr Gln Gly
 85 90 95
 Ala Ser His Gly Gly Leu Lys Thr Leu Thr Ser Ala Ser Val Gly Gly
 100 105 110
 Thr Ala Asp Asn Gly Leu Gly Ala Glu Leu Leu Tyr Ser Gly Leu His
 115 120 125
 Gly Gln Gly Tyr Arg Asp Asn Asn Asp Asn Thr Asp
 130 135 140

<210> 603
 <211> 309
 <212> DNA
 <213> Homo sapiens

<400> 603
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 180
 ggcaaaccgg aagacctcgt agaggggtgtg cgcgcgggtg tggacatgtt cgattcgctg
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 atgccaaccc gtaatgcccg caatgggcat ctgttcacgt atacaggcgt gctgaagatc
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 cgtaacgcg
 309

<210> 604

<211> 103

<212> PRT

<213> Homo sapiens

<400> 604

Xaa Gly Gly Met His Glu Ser Leu Arg Lys Arg Ser Leu Glu Gly Leu
 1 5 10 15
 Asp Lys Ile Gly Phe Asp Gly Leu Ala Ile Gly Gly Leu Ser Val Gly
 20 25 30
 Glu Pro Lys His Glu Met Ile Lys Val Leu Asp Tyr Leu Pro Gly Leu
 35 40 45
 Met Pro Ala Asp Lys Pro Arg Tyr Leu Met Gly Val Gly Lys Pro Glu
 50 55 60
 Asp Leu Val Glu Gly Val Arg Arg Gly Val Asp Met Phe Asp Cys Val
 65 70 75 80
 Met Pro Thr Arg Asn Ala Arg Asn Gly His Leu Phe Ile Asp Thr Gly
 85 90 95
 Val Leu Lys Ile Arg Asn Ala
 100

<210> 605

<211> 428

<212> DNA

<213> Homo sapiens

<400> 605

acgcgttcac gatagggtag ttgcctattt caacgcggtc ggtattttcc tgcacaacaa
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 caccacatc acatttcagt accttggcta tcttcaatcg gaaaaaaga ttggagtaaa
 180
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 300
 ttgcctcgct gctttgccga acgccacct ctgtaccgat acgctgatac tgattgttga
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 aagtccttg
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<210> 606

<211> 135

<212> PRT

<213> Homo sapiens

<400> 606

Met Asp Glu Leu Thr Asn Tyr Thr Tyr Leu Ala Gln Ala Tyr Thr Ile
 1 5 10 15
 Asn Asn Gln Tyr Thr Gln Arg Ile Gly Thr Glu Val Gly Val Arg Gln Ser
 20 25 30
 Ser Glu Ala Ile Asn Val Leu Thr Ala Ser Leu Ser Gln Asp Val Ala

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      35              40              45
Trp Gly Pro Leu His Trp Glu Ser Val Ile Thr Phe Gln Asn Ser Ser
  50              55              60
Ser Gln Thr Ala Leu Pro Leu Pro Lys Leu Asn Ile Tyr Ser Asn Leu
  65              70              75              80
Phe Phe Arg Leu Lys Ile Ala Lys Val Leu Lys Cys Asp Val Gly Ala
      85              90              95
Asp Val Arg Tyr Phe Thr Lys Tyr Tyr Ala Pro Asp Tyr Ser Pro Ala
      100              105              110
Leu Gly Gln Phe Val Val Gln Glu Asn Thr Asp Arg Val Gly Ile Gly
      115              120              125
Asn Tyr Pro Ile Val Asn Ala
      130              135

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<210> 607
 <211> 366
 <212> DNA
 <213> Homo sapiens

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<400> 607
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gacattgtgt gtaaaggatt ctttagaaaa ttggaaaacg tagtgaccgg agtcaatttg
  120
gtttttcaacg gcaaacatta tcaaattgta aagaagagg atgacattt caaattgacc
  180
aaaagcaatt gttacaagtt gagcaacata aaatttaaca attggaaata cttgtacttg
  240
acaacgcacg gtgtgtacaa cgtgttcacc aacagctttc attcgagctg tccatttttg
  300
ttgggacacca cgttgccgca gacattcaag aagccaccg acgaaaagta ttgcccgcag
  360
gacgcg
  366

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<210> 608
 <211> 122
 <212> PRT
 <213> Homo sapiens

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<400> 608
Asp His Asp Glu Leu Trp Ala Tyr Thr Tyr Glu Asn Val Met Ala Leu
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Asn Leu Pro Pro Asp Ile Val Cys Lys Gly Phe Phe Arg Lys Leu Glu
      20              25              30
Asn Val Val Thr Gly Val Asn Leu Val Phe Asn Gly Lys His Tyr Gln
      35              40              45
Ile Val Lys Lys Glu Asp Asp Leu Phe Lys Leu Thr Lys Ser Asn Cys
      50              55              60
Tyr Lys Leu Ser Asn Ile Lys Phe Asn Asn Trp Lys Tyr Leu Tyr Leu
  65              70              75              80
Thr Thr His Gly Val Tyr Asn Val Phe Thr Asn Ser Phe His Ser Ser
      85              90              95
Cys Pro Phe Leu Leu Gly Thr Thr Leu Pro Gln Thr Phe Lys Lys Pro

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                100                105                110
Thr Asp Glu Lys Tyr Leu Pro Glu Asp Ala
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<210> 609
<211> 291
<212> DNA
<213> Homo sapiens

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120
taccacgcct ggaagcagga cccccacgag acggaatcgc cggcttccaa gtctcgcgcc
180
cgaagccctc aaacttcccc cgcgcgttac gccgggcccgg ctccgaagac accggccaca
240
ctcgaccat ctggggcggg ggcgcgcggc tgggtggtggc gsgtggagcc g
291

<210> 610
<211> 69
<212> PRT
<213> Homo sapiens

<400> 610
Met Ser Pro Val Ala Met Asp Asp Ser Ser Ser Pro Tyr Pro Ala Trp
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Lys Gln Asp Pro His Ala Thr Glu Ser Pro Ala Ser Lys Ser Ser Pro
20     25     30
Pro Lys Pro Gln Thr Ser Pro Ala Pro Tyr Ala Gly Pro Ala Pro Lys
35     40     45
Thr Pro Ala Thr Pro Gly Pro Ser Gly Ala Gly Ala Pro Pro Trp Trp
50     55     60
Trp Arg Val Glu Pro
65

<210> 611
<211> 393
<212> DNA
<213> Homo sapiens

<400> 611
nnnattctgt gtcgattttc ggtcgcatat actatggggg agtattgtat aatgcggcgg
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tgtacccaag tagagagggtt ttcgatgcca cacagtcagg aagaaaagaa gcaagcactg
120
acgcgcatac ggcgcataca aggtcaggta gcgactcttg agcaagcgct tgatcgagggt
180
gcgaatatgt ctgcaattct tcagcagctt gcggccgttc gtggcgagct caacggagggt
240
atggcaacgg ttctggagag ctatctgcgg gaagagtctt ccagtagcga aatcaggagc
300

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gattcgcaga acaagtccat tgacgagacc atctctatcg tccgctccta tctcgcgtag

360

aggcaccagg gtgtcctcgg tgagggcaaa ttt

393

<210> 612

<211> 119

<212> FRT

<213> Homo sapiens

<400> 612

Xaa Ile Leu Cys Arg Phe Ser Val Ala Tyr Thr Met Gly Glu Tyr Cys

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Ile Met Arg Arg Cys Thr Gln Val Glu Arg Cys Ser Met Pro His Ser

20 25 30

Pro Glu Glu Lys Lys Gln Ala Leu Thr Arg Ile Arg Arg Ile Lys Gly

35 40 45

Gln Val Ala Thr Leu Glu Gln Ala Leu Asp Ala Gly Ala Lys Cys Pro

50 55 60

Ala Ile Leu Gln Gln Leu Ala Ala Val Arg Gly Ala Val Asn Gly Leu

65 70 75 80

Met Ala Thr Val Leu Glu Ser Tyr Leu Arg Glu Glu Phe Pro Ser Ser

85 90 95

Glu Ile Arg Ser Asp Ser Gln Asn Lys Ser Ile Asp Glu Thr Ile Ser

100 105 110

Ile Val Arg Ser Tyr Leu Arg

115

<210> 613

<211> 567

<212> DNA

<213> Homo sapiens

<400> 613

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60

ctggaaacgg ttcacaagga agccgagtc ccagcctact ttgtgtcctg acagtgtgga

120

acattgggata aagagagtggt agaaagccctc agagtttgca gtgtcaaatg cattttttac

180

tagaaattca gatttaccta gaagtccttg gggccaaatc acagatttga aaacatctga

240

gcaaatagag gatcatgatg aaatctatgc agaagctcag gagctgggtca atgactgggtt

300

agacacccaaa cttaagcaag aattagcaag tgaggaagaa ggtgatgcta aaacactgt

360

gtcaagtgtc actattatgc cggaagccaa tggccatttg aaatatgaca agttttgatga

420

tttatgtggc tattttggagg aagaagagga aagtaccacc gttcaaaaat ttatagacca

480

tctgtcccat aaaaatgttg tagattctgc aatgatggaa gatcttggaa ggaaggaaaa

540

ccaagacaag aagcagcaga aggatcc

567

<210> 614
 <211> 187
 <212> PRT
 <213> Homo sapiens

<400> 614
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 20 25 30
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 35 40 45
 Ser Glu Phe Ala Val Ser Asn Ala Phe Phe Thr Arg Asn Ser Asp Leu
 50 55 60
 Pro Arg Ser Pro Trp Gly Gln Ile Thr Asp Leu Lys Thr Ser Glu Gln
 65 70 75 80
 Ile Glu Asp His Asp Glu Ile Tyr Ala Glu Ala Gln Glu Leu Val Asn
 85 90 95
 Asp Trp Leu Asp Thr Lys Leu Lys Gln Glu Leu Ala Ser Glu Glu Glu
 100 105 110
 Gly Asp Ala Lys Asn Thr Val Ser Ser Val Thr Ile Met Pro Glu Ala
 115 120 125
 Asn Gly His Leu Lys Tyr Asp Lys Phe Asp Asp Leu Cys Gly Tyr Leu
 130 135 140
 Glu Glu Glu Glu Ser Thr Thr Val Gln Lys Phe Ile Asp His Leu
 145 150 155 160
 Leu His Lys Asn Val Val Asp Ser Ala Met Met Glu Asp Leu Gly Arg
 165 170 175
 Lys Glu Asn Gln Asp Lys Lys Gln Gln Lys Asp
 180 185

<210> 615
 <211> 685
 <212> DNA
 <213> Homo sapiens

<400> 615
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 120
 gggcggggcg cgtgtgcagg gccattggtg gccgcagctg tcattcttga tgatcgaga
 180
 tccggcagga ttgcggggct agcagattcc aagacactat ctgcggccaa gagagagggc
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 <213> Homo sapiens

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 35 40 45
 Arg Arg Ser Gly Arg Ile Ala Gly Leu Ala Asp Ser Lys Thr Leu Ser
 50 55 60
 Ala Ala Lys Arg Glu Ala Leu Phe Asn Val Ile Met Asp Lys Ala Leu
 65 70 75 80
 Ala Val Ser Trp Val Arg Val Glu Ala Asp Glu Cys Asp Arg Leu Gly
 85 90 95
 Met Gln Glu Ala Asp Ile Ser Gly Leu Arg Arg Ala Val Val Arg Leu
 100 105 110
 Gly Val Glu Pro Gly Tyr Val Leu Ser Asp Gly Phe Pro Val Asp Gly
 115 120 125
 Leu Thr Val Pro Asp Leu Gly Met Trp Lys Gly Asp Ser Val Cys Ala
 130 135 140
 Cys Val Ala Ala Ala Ser Ile Val Ala Lys Val Ala Arg Asp Arg Ile
 145 150 155 160
 Met Ile Ala Met Asp Ala Glu Ile Pro Gly Tyr Asp Phe Ala Val His
 165 170 175
 Lys Gly Tyr Ala Thr Ala Leu His Gln Arg Arg Leu Lys Glu Leu Gly
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 Pro Ser Arg Gln His Arg Met Ser Tyr Ala Asn Val Arg Arg Ala Ala
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 Arg Leu His Ser Ser
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 <211> 337
 <212> DNA
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<210> 618

<211> 112

<212> PRT

<213> Homo sapiens

<400> 618

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			20					25					30		
Arg	Cys	Arg	Ser	Thr	Thr	Ser	Ser	Ser	Ala	Pro	Thr	Ala	Ser	Ala	Arg
			35					40				45			
Pro	Cys	Ser	Ser	Lys	Thr	Phe	Pro	Ala	Phe	Pro	Glu	Arg	Ile	Leu	Arg
			50			55					60				
Asn	Phe	Asp	Leu	Ser	Gln	Gln	Asp	Ser	Ala	Leu	Val	Ile	Ser	Ser	Ser
					70					75				80	
Ala	Ala	Thr	Ser	Cys	Gln	Ser	Arg	Trp	Pro	Arg	Ser	Ser	Ser	Val	Ala
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<211> 425

<212> DNA

<213> Homo sapiens

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<211> 137

<212> PRT

<213> Homo sapiens

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 20           25           30
Glu Arg Ala Ser Ile Ala Cys Trp Glu Phe His Leu Ala Ile Glu Lys
 35           40           45
Ser Ile Lys Val Met Ile His Ser Lys Ser Gly Ser Gly Lys His Gly
 50           55           60
His Asn Leu Asp Asp Leu Ile Glu His Leu Ser Lys Phe Glu Ser Gly
 65           70           75
Ile Asp Ser Ser Gly Leu Ala Gly Leu Pro Ser Asp Lys Asp Ala Ile
 85           90           95
Lys Leu Arg Tyr Ala Glu Met Ile Lys Thr Pro Ile Asp Ala Phe Glu
100          105          110
Tyr Tyr Leu Ile Ala Ile Arg Phe Val Ala Asp Ile Val Ser Arg Leu
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<210> 621

<211> 453

<212> DNA

<213> Homo sapiens

<400> 621

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<210> 622

<211> 151

<212> PRT

<213> Homo sapiens

<400> 622

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Pro Gly Lys Gly Ala Ile Leu Thr Asn Met Ser Leu Trp Trp Phe Asp

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20           25           30
Ala Glu Val Ala Gly Arg Ala Met Val Val Glu Glu Leu Asp Met Phe
35           40           45
Pro Val Glu Cys Val Val Arg Gly Tyr Leu Thr Gly Ser Gly Trp Ala
50           55           60
Glu Tyr Gln Arg Asn Gln Ala Val Cys Gly Ile Arg Leu Pro Glu Gly
65           70           75           80
Leu Gln Asn Gly Ser Arg Leu Glu Glu Pro Ile Phe Thr Pro Ala Ile
85           90           95
Lys Ala Pro Gln Gly Glu His Asp Glu Asn Ile Asp Tyr Leu Arg Leu
100          105          110
Val Glu Leu Val Gly Pro Xaa Xaa Ser Ala Gln Leu His Asp Leu Ser
115          120          125
Leu Arg Val Tyr Gln Arg Ala Glu Glu Ile Ala Arg Lys Arg Gly Ile
130          135          140
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<210> 623

<211> 345

<212> DNA

<213> Homo sapiens

<400> 623

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<210> 624

<211> 111

<212> PRT

<213> Homo sapiens

<400> 624

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Met Ser Thr Glu Asp Met Leu Asp Leu Asp Ser Asn Val Ser Tyr Tyr
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20           25           30
Gly Thr Ile Ala Gln Ala Glu Asp Leu Pro Pro Asp Asp Thr His Thr
35           40           45
Gly Ala Glu Leu Val Lys Ser Val Val Asn Ser Ile Thr Cys Val Ser
50           55           60
Pro Leu Tyr Ile Glu Asp Phe Thr Thr Ile Glu Ile Gln Gly Leu Gly

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```

65              70              75              80
Leu His Cys Val Arg Leu Trp Ala Pro Gly Leu Leu Ala Leu Ser Leu
              85              90              95
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 <212> DNA
 <213> Homo sapiens

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20         25         30
Gln Ala Gly Arg Ala Cys Leu Ser Trp Glu Val Val Gly Trp Val Gly
35         40         45
Ala Gln Cys Lys Gly Arg Gln Thr Cys Trp Ser Leu Gly Tyr Asp Pro
50         55         60
Glu Gln Ser Gly Gly Ala Glu Ser Ser Cys Leu Trp Ala Ser Ile Ala
65         70         75         80
Leu Pro Val Asn Tyr Arg Pro Trp Lys Asn His Leu Cys Ile Gln Gln
85         90         95
Met Ser Ser Ser Ile Met Leu Gly Thr
100        105

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<210> 627
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<211> 1294

<212> PRT

<213> Homo sapiens

<400> 628

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<212> DNA

<213> Homo sapiens

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Thr Leu Pro Gly Arg Asn Trp Ile Asn Leu Gly Leu Leu Val Val Ile
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Ile Ala Cys Gly Ile Trp Phe Ser Asn Val Ser Gly Gly Ile Ala Trp
      65           70           75           80
Leu Pro Leu Ala Leu Leu Thr Leu Ala Ser Leu Phe Leu Gly Phe His
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<211> 619

<212> PRT

<213> Homo sapiens

<400> 636

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		20					25						30		
Tyr	Leu	Leu	Asp	Val	Val	Asp	Ser	Glu	Glu	Gln	Asp	Met	Ala	Leu	Asn
		35					40					45			
Ile	His	Ala	Phe	Ser	Ala	Gly	Leu	Gly	Gly	Ala	Ile	Gly	Tyr	Val	Leu
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Gly	Gly	Leu	Asp	Trp	Thr	Gln	Thr	Phe	Leu	Gly	Ser	Trp	Phe	Arg	Thr
65					70				75				80		
Gln	Asn	Gln	Val	Leu	Phe	Phe	Ala	Ala	Ile	Ile	Phe	Thr	Val	Ser	
			85				90					95			
Val	Ala	Leu	His	Leu	Phe	Ser	Ile	Asp	Glu	Glu	Gln	Tyr	Ser	Pro	Gln
			100				105					110			
Gln	Glu	Arg	Ser	Ala	Glu	Glu	Pro	Gly	Ala	Leu	Asp	Gly	Gly	Glu	Pro
			115				120					125			
His	Gly	Val	Pro	Ala	Phe	Pro	Asp	Glu	Val	Gln	Ser	Glu	His	Glu	Leu
	130					135					140				
Ala	Leu	Asp	Tyr	Pro	Asp	Val	Asp	Ile	Met	Arg	Ser	Lys	Ser	Asp	Ser
145			150						155					160	
Ala	Leu	His	Val	Pro	Asp	Thr	Ala	Leu	Asp	Leu	Glu	Pro	Glu	Leu	Leu
			165				170						175		
Phe	Leu	His	Asp	Ile	Glu	Pro	Ser	Ile	Phe	His	Asp	Ala	Ser	Tyr	Pro
			180				185					190			
Ala	Thr	Pro	Arg	Ser	Thr	Ser	Gln	Glu	Leu	Ala	Lys	Thr	Lys	Leu	Pro
		195				200					205				
Arg	Leu	Ala	Thr	Phe	Leu	Lys	Glu	Ala	Ala	Lys	Glu	Asp	Glu	Thr	Leu
210					215						220				
Leu	Asp	Asn	His	Leu	Asn	Glu	Ala	Lys	Val	Pro	Asn	Gly	Ser	Gly	Ser
225					230					235				240	
Pro	Thr	Lys	Asp	Ala	Leu	Gly	Gly	Tyr	Thr	Arg	Val	Asp	Thr	Lys	Pro
			245					250				255			
Ser	Ala	Thr	Ser	Ser	Ser	Met	Arg	Arg	Arg	Arg	His	Ala	Phe	Arg	Arg
		260				265						270			
Gln	Ala	Ser	Ser	Thr	Phe	Ser	Tyr	Gly	Lys	Leu	Gly	Ser	His	Cys	
		275				280					285				
Tyr	Arg	Tyr	Arg	Arg	Ala	Asn	Ala	Val	Val	Leu	Ile	Lys	Pro	Ser	Arg

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Ser Met Ser Asp Leu Tyr Asp Met Gln Lys Arg Gln Arg Gln His Arg
305              310              315              320
His Arg Asn Gln Ser Gly Ala Thr Thr Ser Ser Gly Asp Thr Glu Ser
      325              330              335
Glu Glu Gly Glu Gly Glu Thr Thr Val Arg Leu Leu Trp Leu Ser Met
      340              345              350
Leu Lys Met Pro Arg Glu Leu Met Arg Leu Cys Leu Cys His Leu Leu
      355              360              365
Thr Trp Phe Ser Val Ile Ala Glu Ala Val Phe Tyr Thr Asp Phe Met
      370              375              380
Gly Gln Val Ile Phe Glu Gly Asp Pro Lys Ala Pro Ser Asn Ser Thr
385              390              395              400
Ala Trp Gln Ala Tyr Asn Ala Gly Val Lys Met Gly Cys Trp Gly Leu
      405              410              415
Val Ile Tyr Ala Ala Thr Gly Ala Ile Cys Ser Ala Leu Leu Gln Lys
      420              425              430
Tyr Leu Asp Asn Tyr Asp Leu Ser Val Arg Val Ile Tyr Val Leu Gly
      435              440              445
Thr Leu Gly Phe Ser Val Gly Thr Ala Val Met Ala Met Phe Pro Asn
      450              455              460
Val Tyr Val Ala Met Val Thr Ile Ser Thr Met Gly Ile Val Ser Met
      465              470              475              480
Ser Ile Ser Tyr Cys Pro Tyr Ala Leu Leu Gly Gln Tyr His Asp Ile
      485              490              495
Lys Gln Tyr Ile His His Ser Pro Gly Asn Ser Lys Arg Gly Phe Gly
      500              505              510
Ile Asp Cys Ala Ile Leu Ser Cys Gln Val Tyr Ile Ser Gln Ile Leu
      515              520              525
Val Ala Ser Ala Leu Gly Gly Val Val Asp Ala Val Gly Thr Val Arg
      530              535              540
Val Ile Pro Met Val Ala Ser Val Gly Ser Phe Leu Gly Phe Leu Thr
      545              550              555              560
Ala Thr Phe Leu Val Ile Tyr Pro Asp Val Ser Glu Glu Ala Lys Glu
      565              570              575
Glu Gln Lys Gly Leu Ser Ser Pro Leu Ala Gly Glu Gly Arg Ala Gly
      580              585              590
Gly Asn Ser Glu Lys Pro Thr Val Leu Lys Leu Thr Arg Lys Glu Gly
      595              600              605
Leu Gln Gly Pro Val Glu Thr Glu Ser Val Val
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<210> 637

<211> 370

<212> DNA

<213> Homo sapiens

<400> 637

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120
acgcaaagac cgtcagttgg caggaaagtt ggttcctggt cccttaatcc atgggtgttt
180

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<210> 638
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 638
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 20 25 30
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 35 40 45
 Ile Ala Ile Pro Val Phe Leu Thr Val Pro Asn Ile Ile Asn Ile Gly
 50 55 60
 Ile Gln Ala Ala Val Val Ala Ile Met Ala Phe Gly Met Thr Phe Val
 65 70 75 80
 Ile Val Thr Ser Gly Ile Asp Leu Ser Val Gly Ser Val Ala Ala Leu
 85 90 95
 Ser Ala Met

<210> 639
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 639
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 gaggccgggg acgcgcaggt ctacgacttc tgtgacaacc aggtgcccg aaccaccgag
 180
 aaggatcggg actactggcg ggacgtggga actatcgatg cctaccacga cgcgcacatg
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 300
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 330

<210> 640
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 640

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 Ala Leu Phe Ala Asp Ser Gln Ser Ala Glu Ser Arg His Asp Met Gly
 20 25 30
 Gly Asp Ile Ile Pro Arg Phe Val Glu Ala Gly Asp Ala Gln Val Tyr
 35 40 45
 Asp Phe Cys Asp Asn Gln Val Pro Gly Thr Thr Glu Lys Asp Arg Asp
 50 55 60
 Tyr Trp Arg Asp Val Gly Thr Ile Asp Ala Tyr His Asp Ala His Met
 65 70 75 80
 Asp Leu Val Ser Val Glu Pro Glu Phe Asn Leu Tyr Asn Pro Asp Trp
 85 90 95
 Pro Ile Trp Ser Ile Gln Glu Gln Ala Pro Gly Ala Lys Phe
 100 105 110

<210> 641

<211> 491

<212> DNA

<213> Homo sapiens

<400> 641

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 120
 ggcgacatcc accgcaacaa gcgcaagggtc ttctccaaga tcttcagcca cgaggccctg
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<210> 642

<211> 163

<212> PRT

<213> Homo sapiens

<400> 642

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 20 25 30
 Pro Asn Thr Val Ser Asn Ser Ile Gly Asp Ile His Arg Asn Lys Arg
 35 40 45
 Lys Val Phe Ser Lys Ile Phe Ser His Glu Ala Leu Glu Ser Tyr Leu

50	55	60
Pro Lys Ile Gln Leu Val Ile Gln Asp Thr Leu Arg Ala Trp Ser Ser		
65	70	75
His Pro Glu Ala Ile Asn Val Tyr Gln Glu Ala Gln Lys Leu Thr Phe		80
	85	90
Arg Met Ala Ile Arg Val Leu Leu Gly Phe Ser Ile Pro Glu Glu Asp		95
	100	105
Leu Gly His Leu Phe Glu Val Tyr Gln Gln Phe Val Asp Asn Val Phe		110
	115	120
Ser Leu Pro Val Asp Leu Pro Phe Ser Gly Tyr Arg Arg Gly Ile Gln		125
	130	135
Ala Arg Gln Ile Leu Gln Lys Gly Leu Glu Lys Ala Ile Arg Glu Lys		140
	145	150
Leu Gln Cys		155
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<210> 643
 <211> 628
 <212> DNA
 <213> Homo sapiens

<400> 643
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 tggcttgctgc gcaccaagcc caccaagtcc agccctctac ggcagggctg ggtgtcacca
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<210> 644
 <211> 209
 <212> PRT
 <213> Homo sapiens

<400> 644
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 1 5 10 15
 Ala Glu Gln Asp Ala Ile Thr Leu Arg Glu Gly Gln Tyr Val Glu Val

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Leu Asp Ala Ala His Pro Leu Arg Trp Leu Val Arg Thr Lys Pro Thr
   35                40                45
Lys Ser Ser Pro Ser Arg Gln Gly Trp Val Ser Pro Ala Tyr Leu Asp
   50                55                60
Arg Arg Leu Lys Leu Ser Pro Glu Trp Gly Ala Ala Glu Ala Pro Glu
   65                70                75                80
Phe Pro Gly Glu Ala Val Ser Glu Asp Glu Tyr Lys Ala Arg Leu Ser
   85                90                95
Ser Val Ile Gln Glu Leu Leu Ser Ser Glu Gln Ala Phe Val Glu Glu
  100                105                110
Leu Gln Phe Leu Gln Ser His His Leu Gln His Leu Glu Arg Cys Pro
  115                120                125
His Val Pro Ile Ala Val Ala Gly Gln Lys Ala Val Ile Phe Arg Asn
  130                135                140
Val Arg Asp Ile Gly Arg Phe His Ser Ser Phe Leu Gln Glu Leu Gln
  145                150                155                160
Gln Cys Asp Thr Asp Asp Asp Val Ala Met Cys Phe Ile Lys Asn Gln
  165                170                175
Ala Ala Phe Glu Gln Tyr Leu Glu Phe Leu Val Gly Arg Val Gln Ala
  180                185                190
Glu Ser Val Val Val Ser Thr Ala Ile Gln Glu Phe Tyr Lys Lys Tyr
  195                200                205
Ala

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<210> 645

<211> 417

<212> DNA

<213> Homo sapiens

<400> 645

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120
caagctcagg aatggtgggg gagacagttg gagccacggc agggacaatg gagctcagaa
180
ggtccctctg tcatcccttt tggaacccat tgatctggaa aatttggggc agtgtccctt
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300
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360
agctccaga gctggagcag ttagtccttg ggcctacac tcacagcaca gtttccc
417

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<210> 646

<211> 95

<212> PRT

<213> Homo sapiens

<400> 646

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Met Val Gly Glu Thr Val Gly Ala Thr Ala Gly Thr Met Glu Leu Arg

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Arg Ser Leu Cys His Pro Phe Trp Asn Pro Leu Ile Trp Lys Ile Trp
      20           25           30
Gly Ser Val Leu Phe Arg Arg Tyr Trp Arg His Trp Leu Asp Ile Leu
      35           40           45
Gln Pro Ser Gln Glu Ala Gln Lys Val Asp Val Ile Thr Thr Pro Ile
      50           55           60
Phe Gln Met Lys Lys Leu Ser Leu Trp Asp Leu Arg Lys Leu Pro Glu
      65           70           75           80
Leu Glu Gln Leu Val Pro Gly Pro Tyr Thr His Ser Thr Val Ser
      85           90           95

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<210> 647

<211> 421

<212> DNA

<213> Homo sapiens

<400> 647

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120
cggtagccat gcgtggcgaa ctcccttggc atgggaaaaa cgggtgaggc caacggggac
180
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240
ggatttccgt tgaatgaagg caagaagtcg ggcacgcac cacctgctac cgctcggttg
300
tacgatagcc cgccgcgcac caggttggct acattccaaa cgcaacgcag gaaccgcac
360
gaacagcgtt ttccgcaaca aacccttat gacgtggct ctcgggcatt tcagtgtcga
420
c
421

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<210> 648

<211> 90

<212> PRT

<213> Homo sapiens

<400> 648

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Leu Arg His Val Ala Thr Arg Gln Tyr Ser Ala Phe Pro Pro Gly Phe
      20           25           30
Pro Leu Asn Glu Gly Lys Lys Ser Gly Thr His Pro Pro Ala Thr Ala
      35           40           45
Arg Trp Tyr Asp Ser Arg Gly Ala Thr Arg Leu Ala Thr Phe Gln Thr
      50           55           60
Gln Arg Arg Asn Pro His Glu Gln Arg Phe Ser Gln Gln Thr Pro Tyr
      65           70           75           80
Asp Ala Gly Ser Arg Ala Phe Gln Cys Arg
      85           90

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<210> 649
 <211> 563
 <212> DNA
 <213> Homo sapiens

<400> 649
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 120
 cagttctatgt gtgcactgtc tgtctgtctg tccgtctgcc agcaaccttc aaggccccag
 180
 gaggggaagg caccaatgga aggtgggggc agggaaggag gttagcgttg caagttccaa
 240
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 300
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 360
 aagcctagat tcgctgccaa gaaggccgac attttttaga cttgccacgt taaagggggc
 420
 tgcacaggca cgcactcaaa tccccccctc catgtctccc gcctgtgcac attcaggcaa
 480
 cccgaaacac acaaagacac ggttggaac agcgggccacc tgtgcacaca ggaggttagca
 540
 catggagcgc atctgacccc ggg
 563

<210> 650
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 650
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 20 25 30
 Gly Ser Val Pro Met Ser Gln Ser Met Cys Ala Leu Ser Val Cys Leu
 35 40 45
 Ser Val Cys Gln Gln Pro Ser Arg Pro Gln Glu Gly Lys Ala Pro Met
 50 55 60
 Glu Gly Gly Gly Arg Glu Gly Gly Ser Val Asp Lys Phe Gln Cys Leu
 65 70 75 80
 Ala Phe Pro Pro Gly Asn Pro Glu Leu Gly Leu Ala Pro Pro Ser Leu
 85 90 95
 Pro Val Ser Leu Ala Gln Ala Arg Pro Phe
 100 105

<210> 651
 <211> 351
 <212> DNA
 <213> Homo sapiens

<400> 651

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 cataatggag tccatggggg caaagttatc tctggagct cagcagtga tggatatggg
 120
 taggtgtcag cagcgaatt gtattcccat tggagagcag cttcagtcgg tgttggggaa
 180
 ttctggatag aagcatatga ttggactaca atcctcatct acctaggaa ccttaaaaca
 240
 gtgctctcc acaccttttc cttttagaac tggattgaca tctgggaacg tgactgaaaa
 300
 cttacaagcg tacattgata aaagtacaca actgcctggg ggagagaatt c
 351

<210> 652

<211> 95

<212> PRT

<213> Homo sapiens

<400> 652

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Asp	Met	Val	Arg	Cys	Gln	Gln	Arg	Asn	Cys	Ile	Pro	Ile	Gly	Glu	Gln
		20						25					30		
Leu	Gln	Ser	Val	Leu	Gly	Asn	Ser	Gly	Tyr	Lys	His	Met	Ile	Gly	Leu
		35					40					45			
Gln	Ser	Ser	Ser	Thr	Leu	Gly	Thr	Leu	Asn	Lys	Ser	Ser	Ser	Thr	Pro
	50				55				60						
Phe	Pro	Phe	Arg	Thr	Gly	Leu	Thr	Ser	Gly	Asn	Val	Thr	Glu	Asn	Leu
65			70					75					80		
Gln	Ala	Tyr	Ile	Asp	Lys	Ser	Thr	Gln	Leu	Pro	Gly	Gly	Glu	Asn	
			85					90					95		

<210> 653

<211> 399

<212> DNA

<213> Homo sapiens

<400> 653

nnccggggtg gggctggggg ggggccagca tcagaggagg acatgaccaa gctgtgcaac
 60
 caccggcgga aagctgttgc tatggcaact ctgtaccgca gcattggagac cactgtctca
 120
 cactcttctc ctggagaggg agcgagcccc caaatgttcc aactgtgtc cccagggccc
 180
 ccctctgccc gccctccctg tcgagtctct cctacaacte cacttaatgg gggctcgtgc
 240
 tcccttcccc cagaaccacc ctccagtttc caggccttcc cactctagc aggccctggg
 300
 gggcttttcc cccaagct tgctgaccca gtcccttctg ggggcagtag cagccccctg
 360
 ttcctcccaa ggggcaatgc cccctctcca gccccacct
 399

<210> 654

<211> 133
 <212> PRT
 <213> Homo sapiens

<400> 654
 Xaa Pro Gly Gly Ala Gly Val Gly Pro Ala Ser Glu Glu Asp Met Thr
 1 5 10 15
 Lys Leu Cys Asn His Arg Arg Lys Ala Val Ala Met Ala Thr Leu Tyr
 20 25 30
 Arg Ser Met Glu Thr Thr Cys Ser His Ser Ser Pro Gly Glu Gly Ala
 35 40 45
 Ser Pro Gln Met Phe His Thr Val Ser Pro Gly Pro Pro Ser Ala Arg
 50 55 60
 Pro Pro Cys Arg Val Pro Pro Thr Thr Pro Leu Asn Gly Gly Pro Gly
 65 70 75 80
 Ser Leu Pro Pro Glu Pro Pro Ser Val Ser Gln Ala Phe Pro Thr Leu
 85 90 95
 Ala Gly Pro Gly Gly Leu Phe Pro Pro Arg Leu Ala Asp Pro Val Pro
 100 105 110
 Ser Gly Gly Ser Ser Ser Pro Arg Phe Leu Pro Arg Gly Asn Ala Pro
 115 120 125
 Ser Pro Ala Pro Pro
 130

<210> 655
 <211> 368
 <212> DNA
 <213> Homo sapiens

<400> 655
 tgaaggaaat tctctatggc ttgtgttcat catgtagaac agcccatgag gagaatagga
 60
 gatgaggtgg gaagtgcact gggatctggg ggaagaagcc cggggttcaa gactcagcta
 120
 ctgactgcac ggtgtcaaag gattcgggca tcctctctga ggctgagict tcagatgaca
 180
 gtgagaacag ggacacctgc cctgcccttc tcacggggcg tgtgggcacc catgagcatg
 240
 cttgacaaat gcaaggtgcc atacaacag gaactgcaca atctcaccgc ccggcctact
 300
 cagcattgtt atttttacct ttacatctat atgaagatgt agttccattc cttttaactg
 360
 ttgttttc
 368

<210> 656
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 656
 Met Ala Cys Val His His Val Glu Gln Pro Met Arg Arg Ile Gly Asp
 1 5 10 15
 Glu Val Gly Ser Ala Leu Gly Ser Gly Gly Arg Ser Pro Gly Phe Lys

```

                20                25                30
Thr Gln Leu Leu Thr Ala Trp Cys Gln Arg Ile Arg Ala Ser Ser Leu
      35                40                45
Arg Leu Ser Leu Gln Met Thr Val Arg Thr Gly Thr Pro Ala Leu Pro
      50                55                60
Phe Ser Arg Gly Val Trp Ala Pro Met Ser Met Leu Asp Lys Cys Lys
65      70                75                80
Val Pro Tyr Lys Gln Glu Leu His Asn Leu Thr Ala Arg Pro Thr Gln
      85                90                95
His Cys Tyr Phe Tyr Leu Tyr Ile Tyr Met Lys Met
      100                105

```

<210> 657

<211> 330

<212> DNA

<213> Homo sapiens

<400> 657

```

gtgaccacg gcatgaaaaa gccggggatg atctcatca aacacccctg gggcgagtc
60
aacgaggcgg gcttcaagcg cgccctcgaa gagcgtggca tggccaacgc cgggtgcgag
120
cgtattcagg acagcgacct ggacgtggtg ccgcaattga ccccgctga aaaagccgg
180
tgccgacacc ttgctgatgg tcggcaacgt cggcccttgc gcacaggtgg tcaagtccct
240
ggaccgcatg gggtgggacg tgctgtggt gtctcactgg gggccggccg gnggtcgctt
300
tggcgagctg ggggggccta acgcttctcg
330

```

<210> 658

<211> 102

<212> PRT

<213> Homo sapiens

<400> 658

```

Met Lys Lys Pro Gly Met Ile Leu Ile Asn Asn Pro Trp Gly Glu Ser
  1                5                10                15
Asn Glu Ala Gly Phe Lys Arg Ala Leu Glu Glu Arg Gly Met Ala Asn
      20                25                30
Ala Gly Val Glu Arg Ile Gln Asp Ser Asp Leu Asp Val Val Pro Gln
      35                40                45
Leu Thr Pro Pro Glu Lys Arg Arg Cys Arg His Leu Ala Asp Gly Arg
      50                55                60
Gln Arg Arg Pro Phe Gly Thr Gly Gly Gln Val Pro Gly Pro His Gly
65      70                75                80
Leu Gly Arg Ala Cys Gly Val Ser Leu Gly Ala Gly Arg Xaa Ser Leu
      85                90                95
Trp Arg Ala Gly Gly Ala
      100

```

<210> 659

<211> 1505

<212> DNA

<213> Homo sapiens

<400> 659

gcaggatca tgtccaccac cacatgccaa gtggtggcgt tcctcctgtc catcctgggg
 60
 ctggccggct gcatcgcggc caccgggatg gacatgtgga gcaccagga cctgtacgac
 120
 aaccccgta cctccgtgtt ccagtacgaa gggctctgga ggagctgcgt gaggcagagt
 180
 tcaggcttca ccgaatgcag gccctatttc accatcctgg gacttcacgc catgctgcag
 240
 gcagtgcgag cccatgatgat cgtaggcacc gtccctgggtg ccattggcct cctggatacc
 300
 atctttgccc tgaatgcat ccgattggc agcatggagg actctgccaa agccaacatg
 360
 acactgacct ccgggatcat gttcattgtc tcagggtcttt gtgcaattgc tggagtgtct
 420
 gtgtttgcca acatgctggt gactaacttc tggatgtcca cagctaactat gtacaccggc
 480
 atgggtggga tgggtgcagac tgttcagacc aggtacacat ttggtgcggc tctgttcgtg
 540
 ggctgggtcg ctggaggcct cacactaatt ggggggtgtga tgatgtgcat cgctgcccgg
 600
 ggccctggcac cagaagaaac caactacaaa gccgtttctt atcatgcctc agggccacagt
 660
 gtgctctaca agcctggagg cttcaaggcc agcactggct ttgggtccaa caccaaaac
 720
 aagaagatat acgatggagg tgcccgcaca gaggacgagg tacaactctta tccttccaag
 780
 cagcactatg tgtaatgctc taagacctct cagcacgggc ggaagaaact ccgggagagc
 840
 tcacccaaaa aacaaggaga tccatctag atttcttctt gcttttgact cacagctgga
 900
 agttagaaaa gccctgattt catcttttga gaggccaaat ggtcttagcc tcagtctctg
 960
 tctctaaata ttccaccata aaacagctga gttatttatg aattagaagc tatagctcac
 1020
 attttcaatc ctctatttct ttttttaaat ataactttct actctgatga gagaatgtgg
 1080
 ttttaattctc tctctcacat tttgatgatt tagacagact cccctcttc ctctagtca
 1140
 ataaacccat tgatgatcta tttcccagct tatcccaag aaaacttttg aaaggaaaaga
 1200
 gtaccccaa agatgttatt ttctgctggt tgaattttgt cteccaccc ccaacttggc
 1260
 tagtaataaa cacttactga agaagaagca ataagagaaa gatatttgta atctctccag
 1320
 cccatgatct cggttttctt acactgtgat cttaaaagt accaaaacca agtcatatttc
 1380
 agtttgaggc aacaaaacct ttctactgct gttgacatct tcttattaca gcaacaccat
 1440
 tctaggagtt tctcgagctc tccactggag tctccctct ctgtctgtct ctcgcagcgg
 1500

tacc

1505

<210> 660

<211> 261

<212> PRT

<213> Homo sapiens

<400> 660

```

Met Ser Thr Thr Thr Cys Gln Val Val Ala Phe Leu Leu Ser Ile Leu
 1          5          10
Gly Leu Ala Gly Cys Ile Ala Ala Thr Gly Met Asp Met Trp Ser Thr
      20          25          30
Gln Asp Leu Tyr Asp Asn Pro Val Thr Ser Val Phe Gln Tyr Glu Gly
      35          40          45
Leu Trp Arg Ser Cys Val Arg Gln Ser Ser Gly Phe Thr Glu Cys Arg
      50          55          60
Pro Tyr Phe Thr Ile Leu Gly Leu Pro Ala Met Leu Gln Ala Val Arg
      65          70          75          80
Ala Leu Met Ile Val Gly Ile Val Leu Gly Ala Ile Gly Leu Leu Val
      85          90          95
Ser Ile Phe Ala Leu Lys Cys Ile Arg Ile Gly Ser Met Glu Asp Ser
      100          105          110
Ala Lys Ala Asn Met Thr Leu Thr Ser Gly Ile Met Phe Ile Val Ser
      115          120          125
Gly Leu Cys Ala Ile Ala Gly Val Ser Val Phe Ala Asn Met Leu Val
      130          135          140
Thr Asn Phe Trp Met Ser Thr Ala Asn Met Tyr Thr Gly Met Gly Gly
      145          150          155          160
Met Val Gln Thr Val Gln Thr Arg Tyr Thr Phe Gly Ala Ala Leu Phe
      165          170          175
Val Gly Trp Val Ala Gly Gly Leu Thr Leu Ile Gly Gly Val Met Met
      180          185          190
Cys Ile Ala Cys Arg Gly Leu Ala Pro Glu Glu Thr Asn Tyr Lys Ala
      195          200          205
Val Ser Tyr His Ala Ser Gly His Ser Val Ala Tyr Lys Pro Gly Gly
      210          215          220
Phe Lys Ala Ser Thr Gly Phe Gly Ser Asn Thr Lys Asn Lys Lys Ile
      225          230          235          240
Tyr Asp Gly Gly Ala Arg Thr Glu Asp Glu Val Gln Ser Tyr Pro Ser
      245          250          255
Lys His Asp Tyr Val
      260

```

<210> 661

<211> 451

<212> DNA

<213> Homo sapiens

<400> 661

```

nnacgcgtgt agtttgtgta tcggcgcgga actcgccgcg tctgatctcg aggagcttc
 60
cccatggagc agattttaac ctgtcttgcc ggaggcgggtg acgacgagcg agagtggcat
120

```

gacaaggcat tatgtgcccc gactgatccg gaggcattct tccctgaaaa ggggtggatcc
 180
 acccgtgagg ccaagcgcac ctgtgagttcc tgtgagggtcc gccaggagtg cttggaggtac
 240
 gcccttgcga atgacgagag gtccggaatc tggggcggat tgtccgagat ggagagggcgt
 300
 cggctgcgca agcggggcgtg acctgacgtc ggagcgcggt tattgacacg gcccggtaaa
 360
 atgccctgtc tgcccgggat ggctgtctgc acgatgcggc atatgcgatg atgcgagacg
 420
 tgggtgtcat cccgtgctcc atgacgtcga c
 451

<210> 662

<211> 85

<212> PRT

<213> Homo sapiens

<400> 662

Met	Asp	Glu	Ile	Leu	Thr	Leu	Leu	Ala	Gly	Gly	Gly	Asp	Asp	Glu	Pro
1			5					10				15			
Glu	Trp	His	Asp	Lys	Ala	Leu	Cys	Ala	Gln	Thr	Asp	Pro	Glu	Ala	Phe
			20					25				30			
Phe	Pro	Glu	Lys	Gly	Gly	Ser	Thr	Arg	Glu	Ala	Lys	Arg	Ile	Cys	Glu
			35				40					45			
Ser	Cys	Glu	Val	Arg	Gln	Glu	Cys	Leu	Glu	Tyr	Ala	Leu	Ala	Asn	Asp
			50				55				60				
Glu	Arg	Phe	Gly	Ile	Trp	Gly	Gly	Leu	Ser	Glu	Met	Glu	Arg	Arg	Arg
65					70				75					80	
Leu	Arg	Lys	Arg	Ala											
					85										

<210> 663

<211> 552

<212> DNA

<213> Homo sapiens

<400> 663

ctcgagcgtc tcgacgccga cggcgcccag ggagccaagg aagacctctc gcagcgcgac
 60
 ccctacgacg tgctcgtcgt aggggggggt cccgcgggtg ccgcggccgc cgtgtacgcg
 120
 gctcgtaaag gcattcgcac cgccatgggtc ggggtctcgga tcggcggcca ggtactcgat
 180
 accgaggcca tcgacaacct catctcgggt cgcacaccca ccggtccgct tctggccgac
 240
 gccctccgca gccacgtcaa cgactacaac attgacgtta ttgagcgtca gaccgcccagc
 300
 gccatagaga ccaccggcgg tatgaccacc gtgcattctga ccgacggcga cctgcggggc
 360
 cgctcagtcg tcgtggccac cgggtgccgc tgccgcaacc ttggcgctacc tggcgaggag
 420
 gaataccgca ccaagggtgt gacctactgc ccgcaactgc atggcccgcct attcacaggc
 480

aaaaagggtgg ccgtcgtcgg aggtggaaac tccggtattg aggccgctat cgacctcgcc
540

ggcgtcgtcg ac

552

<210> 664

<211> 184

<212> PRT

<213> Homo sapiens

<400> 664

Leu	Glu	Arg	Leu	Asp	Ala	Asp	Ala	Ala	Gln	Gly	Ala	Lys	Glu	Asp	Leu
1				5					10					15	
Ser	Gln	Arg	Asp	Pro	Tyr	Asp	Val	Leu	Val	Val	Gly	Ala	Gly	Pro	Ala
			20					25					30		
Gly	Ala	Ala	Ala	Ala	Val	Tyr	Ala	Ala	Arg	Lys	Gly	Ile	Arg	Thr	Ala
			35					40					45		
Met	Val	Gly	Ser	Arg	Ile	Gly	Gly	Gln	Val	Leu	Asp	Thr	Glu	Ala	Ile
	50					55					60				
Asp	Asn	Leu	Ile	Ser	Val	Pro	His	Thr	Thr	Gly	Pro	Arg	Leu	Ala	Asp
65					70					75				80	
Ala	Leu	Arg	Ser	His	Val	Asn	Asp	Tyr	Asn	Ile	Asp	Val	Ile	Glu	Arg
				85					90					95	
Gln	Thr	Ala	Ser	Ala	Ile	Glu	Thr	Thr	Gly	Gly	Met	Thr	Thr	Val	His
			100					105						110	
Leu	Thr	Asp	Gly	Asp	Leu	Arg	Ala	Arg	Ser	Val	Ile	Val	Ala	Thr	Gly
			115				120						125		
Ala	Arg	Trp	Arg	Asn	Leu	Gly	Val	Pro	Gly	Glu	Glu	Glu	Tyr	Arg	Thr
			130				135					140			
Lys	Gly	Val	Thr	Tyr	Cys	Pro	His	Cys	Asp	Gly	Pro	Leu	Phe	Thr	Gly
145					150					155				160	
Lys	Lys	Val	Ala	Val	Val	Gly	Gly	Gly	Asn	Ser	Gly	Ile	Glu	Ala	Ala
				165					170					175	
Ile	Asp	Leu	Ala	Gly	Val	Val	Asp								
							180								

<210> 665

<211> 352

<212> DNA

<213> Homo sapiens

<400> 665

acgcgtacag ttcgccgtcg aggttgaaca ccacgatcgg tgtaccggtc acttcgtcga
60
acacgctctt catttcgcc gccagcagtt cggcgccggc gcagacaaag gtccaggcct
120
cgctcacgcg gtggccccgg ccagcggcgt ttccaggatc tcgaaacgca ggtcgtcgcg
180
cttggggatg ccgaatcgtt cgtcgccata cgggaacggc ttcttgatgc cggtcgcgcg
240
gtagccgcgg cgctcgtaga agcgatcaga tcgcgcgcac gtcgatcaact gtcatctgca
300
ttaccggcac gtccattcgg cgcgcggcgt gggcttcggc ggcgtccatc aa
352

<210> 666
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 666
 Met Glu Arg Ala Gly Asn Ala Asp Asp Ser Asp Arg Arg Ala Arg Asp
 1 5 10 15
 Leu Ile Ala Ser Thr Ser Ala Ala Ala Thr Cys Ala Pro Ala Ser Arg
 20 25 30
 Ser Arg Ser Arg Met Ala Thr Asn Asp Ser Ala Ser Pro Ser Ala Thr
 35 40 45
 Thr Cys Val Ser Arg Ser Trp Lys Ser Arg Trp Pro Gly Pro Pro Arg
 50 55 60
 Glu Arg Gly Leu Asp Leu Cys Leu Arg Arg Arg Thr Ala Ala Gly
 65 70 75 80
 Arg Asn Glu Glu Arg Val Arg Arg Ser Asp Arg Tyr Thr Asp Arg Gly
 85 90 95
 Val Gln Pro Arg Arg Arg Thr Val Arg
 100 105

<210> 667
 <211> 391
 <212> DNA
 <213> Homo sapiens

<400> 667
 nacgcgtacg aatcggtgtt gcgtcgcaac ccaggggagg ccgagttcca ccaggctgtg
 60
 cgggagatct ttgaatctct cggcccggtg ctcgacaaga atccgcagta cgtggaggca
 120
 gccgtgttgt cgcgcatctg cgaaccggaa cgccagatca ttttccgggt gccgtgggtt
 180
 gacgacgagg gcaagatccg tatcaaccgt ggcttccgcg ttgaatatc gtcggtactg
 240
 gggccgtata aggggtggatt gcgattccac ccctcggtgt acttaggaac gattaagttc
 300
 cttgggttttg agcagatctt caaaaatgct ctgactggca tgccgatcgg tggcgcgaa
 360
 ggtgggtcgg actttgatcc ccatgaocgcg t
 391

<210> 668
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 668
 Xaa Ala Tyr Glu Ser Val Leu Arg Arg Asn Pro Gly Glu Ala Glu Phe
 1 5 10 15
 His Gln Ala Val Arg Glu Ile Phe Glu Ser Leu Gly Pro Val Leu Asp
 20 25 30
 Lys Asn Pro Gln Tyr Val Glu Ala Ala Val Leu Ser Arg Ile Cys Glu

```

      35              40              45
Pro Glu Arg Gln Ile Ile Phe Arg Val Pro Trp Val Asp Asp Glu Gly
  50              55              60
Lys Ile Arg Ile Asn Arg Gly Phe Arg Val Glu Tyr Ser Ser Val Leu
  65              70              75              80
Gly Pro Tyr Lys Gly Gly Leu Arg Phe His Pro Ser Val Tyr Leu Gly
      85              90              95
Thr Ile Lys Phe Leu Gly Phe Glu Gln Ile Phe Lys Asn Ala Leu Thr
     100              105              110
Gly Met Pro Ile Gly Gly Ala Lys Gly Gly Ser Asp Phe Asp Pro His
     115              120              125
Asp Ala
     130

```

<210> 669

<211> 707

<212> DNA

<213> Homo sapiens

<400> 669

```

nngagtcgct tccccgtcta agctcatcgt ggtggctgtg gcatggccgt caacaaggga
  60
attgagaaca cccttgtctgc cttcggccac gcggtcgagg tgggatgcac ctaccttgaa
  120
actgacgttc acgcgaccag cgacgggggtg ctagtggcct tccacgatcc gatactcgat
  180
cgcgctactg aatcaggcgg agtcatcgcc gccatgccgt ggcacaaggt caacaagcc
  240
aagggttggt gcgaaccgat ccccacetta gatgagattt tcgacgcctt tcccgacgag
  300
ttcatcaata tcgacatcaa gcatgatggc gccaccatgc cgctcatcga cgttctttcc
  360
cgtcaccggg cttggagtgc ggtttgcgtc gggtcgttca gcagtaaacg catccagacc
  420
ttccgtcgcc tgggttcaggg acgcactcgc actgcagtgg ggtcgggtgg agtcnnggct
  480
ggggtgtcat cagccctcat agcatgcaga tggcacagtc ccatgggaat gcgtaccagg
  540
tgccgcaccg cttgaccggg tnatgggggtg cccttctgta caccgacctt cattaaagct
  600
gcccactcgt aggggcgagc tgttcatgtc tggacggtta atgagatctc tgaggctcga
  660
gaactgatgg atatgggggt cgacggcatc gtcacagatc gtccgga
  707

```

<210> 670

<211> 170

<212> PRT

<213> Homo sapiens

<400> 670

```

Met Ala Val Asn Lys Gly Ile Glu Asn Thr Leu Ala Ala Phe Gly His
  1              5              10              15
Ala Val Glu Val Gly Cys Thr Tyr Leu Glu Thr Asp Val His Ala Thr

```

```

                20                25                30
Ser Asp Gly Val Leu Val Ala Phe His Asp Pro Ile Leu Asp Arg Val
                35                40                45
Thr Glu Ser Gly Gly Val Ile Ala Ala Met Pro Trp His Lys Val Lys
                50                55                60
Gln Ala Lys Val Gly Gly Glu Pro Ile Pro Thr Leu Asp Glu Ile Phe
65                70                75                80
Asp Ala Phe Pro Asp Ala Phe Ile Asn Ile Asp Ile Lys His Asp Gly
                85                90                95
Ala Thr Met Pro Leu Ile Asp Val Leu Ser Arg His Arg Ala Trp Ser
                100                105                110
Arg Val Cys Val Gly Ser Phe Ser Ser Lys Arg Ile Gln Thr Phe Arg
                115                120                125
Arg Leu Val Gln Gly Arg Thr Ala Thr Ala Val Gly Ser Val Gly Val
                130                135                140
Xaa Ala Gly Leu Ser Ser Ala Leu Ile Ala Cys Arg Trp His Ser Pro
145                150                155                160
Met Gly Met Arg Thr Arg Cys Arg Thr Ala
                165                170

```

<210> 671

<211> 444

<212> DNA

<213> Homo sapiens

<400> 671

```

acgcgtgggc cttcgggttg atgggatcag aaggggacgg gacctgtaga aaggggcctg
60
cagctcagag catggggcgg ccttggtcca ctacgcctgc agctgtgaat tegtctccg
120
gtgctggaga gggatctggt tatctccatt ctctgtctc cactgggaaa ggaaggacgt
180
gcgctctcat cctacgtgtt ttgagaaatc gcattgtccc cagctctgcg ggaggatctg
240
gggacgcagt ggggaaccag acaggcagtt ggaggtctag tgcgcgccag aagccagttc
300
ccaccagggt tgccatttgc tgggcgccct agggagctgc gtgggcatcc agaggagtga
360
gtgcgccctt gctctgtcca gtgccacctt ccccgggcag ggcaggcgtt attaacgtag
420
agggagaaca cccatgcaca caac
444

```

<210> 672

<211> 103

<212> PRT

<213> Homo sapiens

<400> 672

```

Met Gly Ser Glu Gly Asp Gly Thr Cys Arg Lys Gly Pro Ala Ala Gln
1                5                10                15
Ser Met Gly Arg Pro Trp Leu Thr Thr Pro Ala Ala Val Asn Ser Phe
                20                25                30
Ser Gly Ala Gly Glu Gly Ser Gly Tyr Leu His Ser Leu Val Ser Thr

```

```

          35              40              45
Trp Lys Gly Arg Thr Cys Ala Leu Ile Leu Arg Val Leu Arg Asn Arg
  50              55              60
Ile Val Pro Ser Ser Ala Gly Gly Ser Gly Asp Ala Val Gly Asn Gln
  65              70              75              80
Thr Gly Ser Trp Arg Ser Ser Ala Arg Gln Lys Pro Val Pro Thr Gln
          85              90              95
Gly Ala Ile Cys Trp Ala Pro
          100

```

<210> 673
 <211> 452
 <212> DNA
 <213> Homo sapiens

```

<400> 673
acgcgtccct gcagaaatcc tctcggccta ggtcatccgc aagatgtggc agggcatgca
60
ccgtgaaagc cttcaagtct gccgcagcaa gaccgcacgc ctgctgaaat tcgcagttgt
120
gccgcgggtcc ctgatgcgga caaactcggc caccacgacg agcctgacgc ttgcggacca
180
acgttcaaat actgtgcact tgaacgtcc gggccgcac acctgggtga ctttgtgcga
240
ccgacattac ttatgttcac gctctttcag ttctgtgcaa tacctatttt ttgcgtgacg
300
tctccatcag aaaaatgtcg gtgttacccg accgcagacg atgcgtaccc ttgcgtgacg
360
gatggaggcc ttgaaaagtg cattagccac tactggggcga atctacggca aaaagctgtt
420
actaggcggt gattggggag gcccgtagtg gc
452

```

<210> 674
 <211> 134
 <212> PRT
 <213> Homo sapiens

```

<400> 674
Met Trp Gln Gly Met His Arg Glu Ser Leu Gln Val Cys Arg Ser Lys
  1              5              10              15
Thr Ala Arg Leu Leu Lys Phe Ala Val Val Pro Arg Ser Leu Met Arg
  20              25              30
Thr Asn Ser Ala Thr Thr Ile Ser Leu Thr Leu Ala Asp Gln Arg Ser
  35              40              45
Asn Thr Val His Leu Lys Arg Pro Gly Arg Ile Thr Trp Val Thr Leu
  50              55              60
Cys Asp Arg His Tyr Leu Cys Ser Arg Ser Phe Ser Ser Cys Gln Tyr
  65              70              75              80
Arg Ile Phe Arg Arg Arg Leu His Gln Lys Asn Val Gly Val Thr Ala
  85              90              95
Pro Gln Thr Met Arg Thr Leu Ala Leu Thr Met Glu Ala Leu Lys Ser
  100              105              110
Ala Leu Ala Thr Thr Gly Arg Ile Tyr Gly Lys Lys Leu Leu Leu Gly

```

115
Gly Asp Trp Gly Gly Pro
130

120

125

<210> 675

<211> 8564

<212> DNA

<213> Homo sapiens

<400> 675

atgtcgggct ccacacagct tgtggcacag acgtggaggg cactgagcc ccgctaccgg
60
ccccacagcc ttctctaccc agtgcagatc gcccgagcgc acacggagcgt cgggctcctg
120
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Thr	His	Thr	Asp	Val	Gly	Leu	Leu	Glu	Tyr	Gln	His	His	Ser	Arg	Asp
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Tyr	Ala	Ser	His	Leu	Ser	Pro	Gly	Ser	Ile	Ile	Gln	Pro	Gln	Arg	Arg
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Arg	Pro	Ser	Leu	Leu	Ser	Glu	Phe	Gln	Pro	Gly	Asn	Glu	Arg	Ser	Gln
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Glu	Leu	His	Leu	Arg	Pro	Glu	Ser	His	Ser	Tyr	Leu	Pro	Glu	Leu	Gly
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Lys	Ser	Glu	Met	Glu	Phe	Ile	Glu	Ser	Lys	Arg	Pro	Arg	Leu	Glu	Leu
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Leu	Pro	Asp	Pro	Leu	Leu	Arg	Pro	Ser	Pro	Leu	Leu	Ala	Thr	Gly	Gln
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Arg Met Gly Ser Lys Ser Pro Gly Asn Thr Ser Gln Pro Pro Ala Phe		
	2260	2265
Phe Ser Lys Leu Thr Glu Ser Asn Ser Ala Met Val Lys Ser Lys Lys		
	2275	2280
Gln Glu Ile Asn Lys Lys Leu Asn Thr His Asn Arg Asn Glu Pro Glu		
	2290	2295
Tyr Asn Ile Ser Gln Pro Gly Thr Glu Ile Phe Asn Met Pro Ala Ile		
2305	2310	2315
Thr Gly Thr Gly Leu Met Thr Tyr Arg Ser Gln Ala Val Gln Glu His		

2325 2330 2335
 Ala Ser Thr Asn Met Gly Leu Glu Ala Ile Ile Arg Lys Ala Leu Met
 2340 2345 2350
 Gly Lys Tyr Asp Gln Trp Glu Glu Ser Pro Pro Leu Ser Ala Asn Ala
 2355 2360 2365
 Phe Asn Pro Leu Asn Ala Ser Ala Ser Leu Pro Ala Ala Met Pro Ile
 2370 2375 2380
 Thr Ala Ala Asp Gly Arg Ser Asp His Thr Leu Thr Ser Pro Gly Gly
 2385 2390 2395 2400
 Gly Gly Lys Ala Lys Val Ser Gly Arg Pro Ser Ser Arg Lys Ala Lys
 2405 2410 2415
 Ser Pro Ala Pro Gly Leu Ala Ser Gly Asp Arg Pro Pro Ser Val Ser
 2420 2425 2430
 Ser Val His Ser Glu Gly Asp Cys Asn Arg Arg Thr Pro Leu Thr Asn
 2435 2440 2445
 Arg Val Trp Glu Asp Arg Pro Ser Ser Ala Gly Ser Thr Pro Phe Pro
 2450 2455 2460
 Tyr Asn Pro Leu Ile Met Arg Leu Gln Ala Gly Val Met Ala Ser Pro
 2465 2470 2475 2480
 Pro Pro Pro Gly Leu Pro Ala Gly Ser Gly Pro Leu Ala Gly Pro His
 2485 2490 2495
 His Ala Trp Asp Glu Glu Pro Lys Pro Leu Leu Cys Ser Gln Tyr Glu
 2500 2505 2510
 Thr Leu Ser Asp Ser Glu
 2515

<210> 677

<211> 345

<212> DNA

<213> Homo sapiens

<400> 677

gtaaatgcaag gtgaacgccc aatggctgcg cagaacaaga gcatttggtca gttcacccctt
 60
 gagggatatag ctccggcacg ccgtggtggt ccacagattg aagttacttt cgatattcgat
 120
 gccaacggta tcttgaatgt gaggcgaaag gataaggcta ccgtaagga acagaagatt
 180
 cgcacgcaag cttcaagtgg tttagtcag gaagaaatcg acagaatgaa agctgaggca
 240
 gaacagaatg cagcagcagg caaggctgaa cgcgaaaaga ttgataagct gaaccaagct
 300
 gactcaatga tttccccccc cgaaaactcc tgaagacaa cgatn
 345

<210> 678

<211> 110

<212> PRT

<213> Homo sapiens

<400> 678

Val Met Gln Gly Glu Arg Pro Met Ala Ala Gln Asn Lys Ser Ile Gly
 1 5 10 15
 Gln Phe Thr Leu Glu Gly Ile Ala Pro Ala Arg Arg Gly Val Pro Gln

```

                20                25                30
Ile Glu Val Thr Phe Asp Ile Asp Ala Asn Gly Ile Leu Asn Val Ser
   35                40                45
Ala Lys Asp Lys Ala Thr Gly Lys Glu Gln Lys Ile Arg Ile Glu Ala
   50                55                60
Ser Ser Gly Leu Ser Gln Glu Glu Ile Asp Arg Met Lys Ala Glu Ala
  65                70                75                80
Glu Gln Asn Ala Ala Ala Gly Lys Ala Glu Arg Glu Lys Ile Asp Lys
                85                90                95
Leu Asn Gln Ala Asp Ser Met Ile Ser Pro Pro Glu Asn Ser
   100                105                110

```

<210> 679

<211> 362

<212> DNA

<213> Homo sapiens

<400> 679

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acgcgtgacg tcaccgctcc atggggaaga tgacgactat ccctgtgaaa gtaaagcata
60
atgggaaaaa tgtacgttaa atgtgctaac gcgcagtatg atgtatctat gaatcttgag
120
ggtacaggcc tggatttcaa gcgtgccatt gctgacgtca cgcattgtcc acccgaacgc
180
caaaaagtac tcattcaaggg aggattgcta aaagacgata cccattagg taaagtgggt
240
gcgcgtgcag gacagcagtt catggtgctg ggtgctgtgg gtgagctgcc caaggcccca
300
gaaaaacctg tgctgttctc ggaggatttg ccggaagacg agctcaacaa ggctaaggat
360
cc
362

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<210> 680

<211> 100

<212> PRT

<213> Homo sapiens

<400> 680

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Met Gly Lys Met Tyr Val Lys Cys Ala Asn Ala Gln Tyr Asp Val Ser
  1                5                10                15
Met Asn Leu Glu Gly Thr Gly Leu Asp Phe Lys Arg Ala Ile Ala Asp
   20                25                30
Val Thr His Val Pro Pro Glu Arg Gln Lys Val Leu Ile Lys Gly Gly
   35                40                45
Leu Leu Lys Asp Asp Thr Pro Leu Gly Lys Val Gly Ala Arg Ala Gly
   50                55                60
Gln Gln Phe Met Val Leu Gly Ala Val Gly Glu Leu Pro Lys Ala Pro
  65                70                75                80
Glu Lys Pro Val Leu Phe Leu Glu Asp Leu Pro Glu Asp Glu Leu Asn
                85                90                95
Lys Ala Lys Asp
   100

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<210> 681
 <211> 357
 <212> DNA
 <213> Homo sapiens

<400> 681
 acgcggtccaa atggacaaac gcttgatgat ttctaccatg aaattagagc aaaatatcca
 60
 gaacaattac tgatggcaga ctgttcaaca gtagaagaaa tgattcacgc tgatgaactc
 120
 gggttttgatt ttatcggaag tacttttagta ggatatacaa aacaaagtaa aggtgacaaa
 180
 atcgaagaaa atgacttttga aatcttgaga acagtttttag aacgaattaa acatccacta
 240
 attgcagaag gcaatatcga tacacctgaa aaggtgaaac gtgtgcttga gttaggcgcg
 300
 tatagtgtcg ttgtagggtc agcgattact cgtccacaac tcatcacgaa aaaattt
 357

<210> 682
 <211> 119
 <212> FRT
 <213> Homo sapiens

<400> 682
 Thr Arg Pro Asn Gly Gln Thr Leu Asp Asp Phe Tyr His Glu Ile Arg
 1 5 10 15
 Ala Lys Tyr Pro Glu Gln Leu Leu Met Ala Asp Cys Ser Thr Val Glu
 20 25 30
 Glu Met Ile His Ala Asp Glu Leu Gly Phe Asp Phe Ile Gly Ser Thr
 35 40 45
 Leu Val Gly Tyr Thr Lys Gln Ser Lys Gly Asp Lys Ile Glu Glu Asn
 50 55 60
 Asp Phe Glu Ile Leu Arg Thr Val Leu Glu Arg Ile Lys His Pro Leu
 65 70 75 80
 Ile Ala Glu Gly Asn Ile Asp Thr Pro Glu Lys Val Lys Arg Val Leu
 85 90 95
 Glu Leu Gly Ala Tyr Ser Val Val Val Gly Ser Ala Ile Thr Arg Pro
 100 105 110
 Gln Leu Ile Thr Lys Lys Phe
 115

<210> 683
 <211> 411
 <212> DNA
 <213> Homo sapiens

<400> 683
 ntctccgacc gcgtggtaaa actggcgacc ttaattgctg aagatgagca agctgaaatg
 60
 aatattgttt tgcccgcagc gtggttgcatt gattgcgtca gttaccctaa aaacatgta
 120
 ttaagagcac aaagtgcatt acatgcagca gataaagcga ttgtattttt gcgcagttat
 180

aattaccccca aacaatactt attagcaatt catcatgcaa tttcagcgca cagtgtcagt
 240
 ggtaaaatcac aggcgaatgag tttagaagct caaatagctg aagatgcaga tagattggat
 300
 gcgctagggg caattggcgt ggctcgttgc attcaagtaa gtagccagtt acagcgccca
 360
 ctatattctg aagttgaccc cttcagcgag acacgatctc tagtctgcat g
 411

<210> 684
 <211> 137
 <212> PRT
 <213> Homo sapiens

<400> 684
 Xaa Ser Asp Arg Val Val Lys Leu Ala Thr Leu Ile Ala Glu Asp Glu
 1 5 10 15
 Gln Ala Glu Met Asn Ile Val Leu Pro Ala Ala Trp Leu His Asp Cys
 20 25 30
 Val Ser Tyr Pro Lys Asn His Val Leu Arg Ala Gln Ser Ala Leu His
 35 40 45
 Ala Ala Asp Lys Ala Ile Val Phe Leu Arg Ser Ile Asn Tyr Pro Lys
 50 55 60
 Gln Tyr Leu Leu Ala Ile His His Ala Ile Ser Ala His Ser Val Ser
 65 70 75 80
 Gly Lys Ile Gln Ala Met Ser Leu Glu Ala Gln Ile Val Gln Asp Ala
 85 90 95
 Asp Arg Leu Asp Ala Leu Gly Ala Ile Gly Val Ala Arg Cys Ile Gln
 100 105 110
 Val Ser Ser Gln Leu Gln Arg Pro Leu Tyr Ser Glu Val Asp Pro Phe
 115 120 125
 Ser Glu Thr Arg Ser Leu Val Cys Met
 130 135

<210> 685
 <211> 417
 <212> DNA
 <213> Homo sapiens

<400> 685
 acgcgttgcg ttgcggagtg aacccggaac gatggatgga ttgacactat tcggcctgtt
 60
 cgccgtcact gcgatgctgg tctgctatgc catggaggac cgcagccact ggttctgtct
 120
 gctgttcgcg gccgcttgcc gctcggttcg gcctacggct tcctccaagg cgctctggcg
 180
 ttgcgcttcg tcgaggcgat atgggcgctc gttgcctgcg gcgtgggtgga cgatcaggcc
 240
 gogatgaccg catcgctccg ctttaagccc gaaacgaaac cgaccagtgc gctgtgttga
 300
 tgggcggcgc gtcgctggat gcacagcgtc tcgacgcgag cgtgatgatg gcctcagcgc
 360
 gtgcacgcg acgctgtcgc tcacgcgctc acgctcgcac acggcgcgcg gcaatag
 417

<210> 686
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 686
 Met Pro Trp Arg Thr Ala Ala Thr Gly Ser Cys Cys Ser Arg Pro
 1 5 10 15
 Leu Gly Ala Arg Phe Gly Leu Arg Leu Pro Pro Arg Arg Leu Ala Val
 20 25 30
 Arg Leu Arg Arg Gly Asp Met Gly Ala Arg Cys Leu Arg Arg Gly Gly
 35 40 45
 Arg Ser Gly Arg Asp Asp Arg Ile Val Arg Leu Lys Pro Gly Asn Glu
 50 55 60
 Thr Asp Gln Cys Ala Gly Leu Met Gly Gly Ala Ser Leu Asp Ala Gln
 65 70 75 80
 Arg Leu Asp Ala Ser Val Met Met Ala Ser Ala Arg Ala Cys Arg Arg
 85 90 95
 Cys Arg Ser Ser Arg Tyr Ala Arg Pro Arg Arg Ala Ala Ile
 100 105 110

<210> 687
 <211> 412
 <212> DNA
 <213> Homo sapiens

<400> 687
 nnacgcgtga ccgaccaact gcgagccacc ctgctcgcca tggctgctat ggggttgcac
 60
 gacggcatcg atattccgctc tggggcgatt attgaaagct gccgcacctt atcagccggt
 120
 ctgatgaaa cccacgggtg tcgcacgata gagcttcggg taccacctgc gtgcgcgggt
 180
 caattggcgg ccaattgagtc gggccccaac caccacggg gcactccgcc caatgtggcc
 240
 gagaccgacc ctgtcacctt cctgcagttg gcaactggct tctcacactg gccagaaatg
 300
 cgctcagcag gacgggttca ggcgtctgga tcccacgtcg acgacgttgc tggcgtgttc
 360
 ccagtcgttg atatggccgg ggttttccgc gacatttttg ccgacgacta ga
 412

<210> 688
 <211> 136
 <212> PRT
 <213> Homo sapiens

<400> 688
 Xaa Arg Val Thr Asp Gln Leu Arg Ala Thr Leu Leu Ala Met Ala Ala
 1 5 10 15
 Met Gly Leu His Asp Gly Ile Asp Ile Pro Ser Gly Ala Ile Ile Glu
 20 25 30
 Ser Cys Arg Thr Leu Ser Ala Val Leu Asp Glu Thr His Gly Gly Arg

```

      35              40              45
Thr Ile Glu Leu Arg Val Pro Pro Ala Cys Ala Val Gln Leu Ala Ala
  50              55              60
Ile Glu Ser Gly Pro Asn His His Arg Gly Thr Pro Pro Asn Val Ala
  65              70              75              80
Glu Thr Asp Pro Val Thr Phe Leu Gln Leu Ala Thr Gly Phe Ser His
      85              90              95
Trp Pro Glu Met Arg Ser Ala Gly Arg Val Gln Ala Ser Gly Ser His
      100              105              110
Val Asp Asp Val Ala Gly Val Phe Pro Val Val Asp Met Ala Gly Val
      115              120              125
Phe Arg Asp Ile Phe Ala Asp Asp
      130              135

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<210> 689

<211> 499

<212> DNA

<213> Homo sapiens

<400> 689

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cgctgcgcgg tactcgacgt cgattttcat cacggtaacg gcaccacgaa cattttttac
  60
cgcgcgaatg acgtgatgtt catatcgctg cacggcgagc cggccggtgc ctatccctac
  120
tattcggggt tcagcgatga agtcggcgca ggtggttgccg aagggttcaa cctcaactac
  180
ccgctgccga aaaacaccgc ctgggatacc taccgcgacg cctgctgca tgccctgcagg
  240
aaactccagc aattctcgcc gcagggtattg gtgatctcac tgggggtcga caccttcaag
  300
gacgacccga tcagtcactt cctgctggaa ggcgaggatt tcatcgggat cggcgagctg
  360
atagcgagtg tgggttgccc caccctgttt gtgatggaag gcgctatat ggtcgatgaa
  420
atcggaatca acgcggtgaa cgtactgcat ggcttcgaga gcaagcgcgc ttgagcatcc
  480
gccgaagac ggcgtgata
  499

```

<210> 690

<211> 157

<212> PRT

<213> Homo sapiens

<400> 690

```

Arg Val Ala Val Leu Asp Val Asp Phe His His Gly Asn Gly Thr Gln
  1              5              10              15
Asn Ile Phe Tyr Pro Arg Asn Asp Val Met Phe Ile Ser Leu His Gly
      20              25              30
Glu Pro Ala Val Ser Tyr Pro Tyr Tyr Ser Gly Phe Ser Asp Glu Val
      35              40              45
Gly Ala Gly Val Gly Glu Gly Phe Asn Leu Asn Tyr Pro Leu Pro Lys
      50              55              60
Asn Thr Ala Trp Asp Thr Tyr Arg Asp Ala Leu Leu His Ala Cys Arg

```

```

65              70              75              80
Lys Leu Gln Gln Phe Ser Pro Gln Val Leu Val Ile Ser Leu Gly Val
      85              90              95
Asp Thr Phe Lys Asp Asp Pro Ile Ser His Phe Leu Leu Gly Glu
      100              105              110
Asp Phe Ile Gly Ile Gly Glu Leu Ile Ala Ser Val Gly Cys Pro Thr
      115              120              125
Leu Phe Val Met Glu Gly Gly Tyr Met Val Asp Glu Ile Gly Ile Asn
      130              135              140
Ala Val Asn Val Leu His Gly Phe Glu Ser Lys Arg Ala
145              150              155

<210> 691
<211> 336
<212> DNA
<213> Homo sapiens

<400> 691
ntgctgcgtg aaaacgtgca gcgcggcgca tcagcgactg gcgagcgctt tggctggag
60
tcgcaaaggc aaggccctg ggagttggc tgcgacatcg cgctgcctg gcgccaccg
120
aacgaactgg acgccaagc gccccgcaag ctgctgcgca acggctgcct ttgctggct
180
ggaggcgoga atatgccgcc cgcgcttgag gctgtggata tctttatcga ggcgggcatt
240
ctgttcgcgc ccggcaaggc atccaatgcc ggcggcgctg ccgtgagtgg cctggaaatg
300
tcgcagaaag ccattgcgct gctgtggacc gccggc
336

<210> 692
<211> 112
<212> PRT
<213> Homo sapiens

<400> 692
Xaa Leu Arg Glu Asn Val Gln Arg Gly Ala Ser Ala Thr Gly Glu Arg
1      5      10      15
Phe Gly Trp Ser Ser Gln Arg Gln Gly Pro Trp Glu Leu Ala Cys Asp
      20      25      30
Ile Ala Leu Pro Cys Ala Thr Gln Asn Glu Leu Asp Ala Asp Ala Ala
      35      40      45
Arg Thr Leu Leu Arg Asn Gly Cys Leu Cys Val Ala Gly Gly Ala Asn
50      55      60
Met Pro Pro Ala Leu Glu Ala Val Asp Ile Phe Ile Glu Ala Gly Ile
65      70      75      80
Leu Phe Ala Pro Gly Lys Ala Ser Asn Ala Gly Gly Val Ala Val Ser
      85      90      95
Gly Leu Glu Met Ser Gln Asn Ala Met Arg Leu Leu Trp Thr Ala Gly
100      105      110

<210> 693
<211> 580

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<212> DNA

<213> Homo sapiens

<400> 693

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ngggcaaccc ggaaggtccg gcgtcccagc cgcctacctc gctgggaccc tggctcttgct
60
gtcccccgct ggcctcctgc ccaagcgact gcggccagga tggggccgaa ggtgaccgtg
120
gccacctgcg cactcaacca gtgggccctg gacttcgagg gcaatttgca aagaatttta
180
aagagtattg aaattgccaa aaacagagga gcaagatata ggcttgagacc agagctggaa
240
atatgcggct gcggatgttg ggatcattat tacgagtcgg acaccctctt gcaactgttt
300
caagtcctag cggcccttgt ggagtcctcc gtcactcagg acatcatctg cgacgtgggg
360
atactgtaa tgcaccgaaa cgtccgctac aactgcagag tgatattcct caacaggaag
420
atcctgctca tcagacccaa gatggccttg gccaatgaag gcaactaccg cgagctgcgc
480
tggttcacc cgtggctcag gagtcgggtga gtcgggtgcc tgaccactcc tgggatgtgc
540
gtaagcacc tccgctgtgt gtagccttgg gtccctgatca
580

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<210> 694

<211> 136

<212> PRT

<213> Homo sapiens

<400> 694

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Met Gly Arg Lys Val Thr Val Ala Thr Cys Ala Leu Asn Gln Trp Ala
1      5      10      15
Leu Asp Phe Glu Gly Asn Leu Gln Arg Ile Leu Lys Ser Ile Glu Ile
20     25     30
Ala Lys Asn Arg Gly Ala Arg Tyr Arg Leu Gly Pro Glu Leu Glu Ile
35     40     45
Cys Gly Cys Gly Cys Trp Asp His Tyr Tyr Glu Ser Asp Thr Leu Leu
50     55     60
His Ser Phe Gln Val Leu Ala Ala Leu Val Glu Ser Pro Val Thr Gln
65     70     75     80
Asp Ile Ile Cys Asp Val Gly Ile Pro Val Met His Arg Asn Val Arg
85     90     95
Tyr Asn Cys Arg Val Ile Phe Leu Asn Arg Lys Ile Leu Leu Ile Arg
100    105    110
Pro Lys Met Ala Leu Ala Asn Glu Gly Asn Tyr Arg Glu Leu Arg Trp
115    120    125
Phe Thr Pro Trp Ser Arg Ser Arg
130    135

```

<210> 695

<211> 439

<212> DNA

<213> Homo sapiens

<400> 695
 ntgggtgactc aggcgtccaa tggcagcatg gctgacgtcg tcaatatgcc gtccctgacc
 60
 atcatggctc tgtcgagggc tgattacctg ctgatatacg agacttcggg gcccggtatc
 120
 ggcgacaagt tcgtcccgga cgtctggggc aaactcaaac tcggcaagga caacgagcac
 180
 accgctctgc cctggtaatt cggcccgctc gtcgtgacgt acaacaagga cattttcaag
 240
 gatgttgccc tcgataccga aatcccgccg aagacgatga caggtacac cgacttcgcc
 300
 aagaaaaatca ccgctgccgg caagcaggcg gtctatggca acacgtcgtg gtacatgctc
 360
 gcggaatggt gtgccctcgg cgtcaaggtc atgaatgacg acttcaccaa gttcactttt
 420
 gcctcggaat ccaacgcgt
 439

<210> 696

<211> 146

<212> PRT

<213> Homo sapiens

<400> 696

Xaa	Val	Thr	Gln	Ala	Ser	Asn	Gly	Thr	Met	Ala	Asp	Val	Val	Asn	Met
1				5				10					15		
Pro	Ser	Ser	Thr	Ile	Met	Ala	Leu	Ser	Arg	Ala	Asp	Tyr	Leu	Leu	Asp
			20					25					30		
Ile	Glu	Thr	Ser	Val	Pro	Gly	Ile	Gly	Asp	Lys	Phe	Val	Pro	Asp	Val
			35				40				45				
Trp	Gly	Lys	Leu	Lys	Leu	Gly	Lys	Asp	Asn	Glu	His	Thr	Ala	Leu	Pro
			50			55				60					
Trp	Tyr	Phe	Gly	Pro	Phe	Val	Val	Thr	Tyr	Asn	Lys	Asp	Ile	Phe	Lys
65				70					75				80		
Asp	Val	Gly	Leu	Asp	Pro	Glu	Ile	Pro	Pro	Lys	Thr	Met	Thr	Glu	Tyr
				85				90				95			
Leu	Asp	Phe	Ala	Lys	Lys	Ile	Thr	Ala	Ala	Gly	Lys	Gln	Ala	Val	Tyr
			100				105					110			
Gly	Asn	Thr	Ser	Trp	Tyr	Met	Leu	Ala	Glu	Trp	Arg	Ala	Leu	Gly	Val
			115			120					125				
Lys	Val	Met	Asn	Asp	Asp	Phe	Thr	Lys	Phe	Thr	Phe	Ala	Ser	Glu	Ser
			130			135					140				
Asn	Ala														
145															

<210> 697

<211> 368

<212> DNA

<213> Homo sapiens

<400> 697

nggcaataac gccgtcgtcg aaatccgttc ccttgatctc gaacatgccg atgaagcggg
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tgtcggtgat ggggtcggag atgtcgcctt cccacaactt gaacttgatc ggaccaaccc
 120
 ttccaccctt ggagagactc gctgccttg aaagtcttct tgccttctt gggcaactga
 180
 tcgcccctcc gaacgagata atccaagctc aagcgacgc ccaccttgtc gcgcgcctcc
 240
 acaccgacgg aatgcgatgc cgggatcgca tcgatgctag cggcgggtgc tgcaatgaca
 300
 atcttgtctt cagcagcga tacggggccg cgttggaat cgaacacaaa caccttgaag
 360
 gcgttgtn
 368

<210> 698

<211> 108

<212> PRT

<213> Homo sapiens

<400> 698

Met	Pro	Met	Lys	Arg	Leu	Ser	Val	Met	Gly	Ser	Glu	Met	Ser	Pro	Ser
1			5					10					15		
His	Asn	Leu	Asn	Leu	Ile	Gly	Pro	Thr	Leu	Ser	Thr	Leu	Glu	Arg	Leu
		20				25						30			
Ala	Cys	Leu	Glu	Ser	Leu	Leu	Ala	Leu	Gly	Gln	Leu	Ile	Ala	Leu	
		35				40				45					
Pro	Asn	Glu	Ile	Ile	Gln	Ala	Gln	Ala	Thr	Ala	His	Leu	Val	Ala	Arg
		50			55				60						
Leu	His	Thr	Asp	Gly	Met	Arg	Cys	Arg	Asp	Arg	Ile	Asp	Ala	Ser	Gly
		65			70				75					80	
Gly	Ala	Cys	Asn	Asp	Asn	Leu	Val	Phe	Thr	Gln	Arg	Tyr	Gly	Pro	Ala
			85					90						95	
Val	Gly	Ile	Glu	His	Lys	His	Leu	Glu	Gly	Val	Val				
			100					105							

<210> 699

<211> 363

<212> DNA

<213> Homo sapiens

<400> 699

nacgcgtaca caaatagtat cggaatcatt tcctatcatg ctgctatgac gagatttctc
 60
 cacacctcag attggcaact ggggatgact cggcactacc tgtcgaagcg ggcgcacgac
 120
 gaccacacagg cacgggtttac tgccgatcga atcgagacgg tgcgcaggct gggcgacgtt
 180
 gcccggaagg agggctgcga gtttgcgtc gtcgcggag atgtcttcga aaccacacat
 240
 gtctccactc agatcattgc ccgcgcgtgt gaggcgatag cctccattga tctccccgtg
 300
 tacctctgctc ccggaaatca cgacagctta gagccgggggt gtctctggga tgggcccagaa
 360
 ttc
 363

<210> 700
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 700
 Xaa Ala Tyr Thr Asn Ser Ile Gly Ile Ile Ser Tyr His Ala Ala Met
 1 5 10 15
 Thr Arg Phe Leu His Thr Ser Asp Trp Gln Leu Gly Met Thr Arg His
 20 25 30
 Tyr Leu Ser Lys Arg Gly Asp Asp Pro Gln Ala Arg Phe Thr Ala
 35 40 45
 Asp Arg Ile Glu Thr Val Arg Arg Leu Gly Asp Val Ala Arg Lys Glu
 50 55 60
 Gly Cys Glu Phe Val Val Val Ala Gly Asp Val Phe Glu Thr His Asn
 65 70 75 80
 Val Ser Thr Gln Ile Ile Ala Arg Ala Cys Glu Ala Ile Ala Ser Ile
 85 90 95
 Asp Leu Pro Val Tyr Leu Leu Pro Gly Asn His Asp Ser Leu Glu Pro
 100 105 110
 Gly Cys Leu Trp Asp Gly Pro Glu Phe
 115 120

<210> 701
 <211> 585
 <212> DNA
 <213> Homo sapiens

<400> 701
 nacgcgtccg ggcacaccgt caccgaggcg acgttccacg gccacccac gctgatctat
 60
 ttccggtacg tccattgcgc ggatgtctgc ccgctgacac tgggcaacat gggtccggcc
 120
 ctgcagtcgc tgggctcccg ggcggacggc atcgctccga tcttcacetc cgtcgatccg
 180
 gcccgcgaca caccgcgcgt ggtcggacag tatgtcgcgc atttcctgcc cggcagtcgc
 240
 gggtgacccg gcaccgcagc gcagctggcg ccggtactgg cggagttcca catcaccgcg
 300
 cgcgcgaac ctgcggcaca cgacatggcc gccgacatgt atgccttoga ccacagcgcc
 360
 ctccctctatc tgatggacgg caacaacgcg ctgttgcggg tgatggcggt cagcgcgac
 420
 gctgcctcgc tgacgcacca gctggcgggc gccctggccg gggcaagaat gagaccatga
 480
 aagcgatcgg accgacggac gccccgaac aggcagcgcc gggtggtcgc ttcggcatca
 540
 tctgtctgct cggcatcgcc ggcattgctg atttcgtoga ccggt
 585

<210> 702
 <211> 159
 <212> PRT

<213> Homo sapiens

<400> 702

Xaa Ala Ser Gly His Thr Val Thr Glu Ala Thr Phe His Gly His Pro
 1 5 10 15
 Thr Leu Ile Tyr Phe Gly Tyr Val His Cys Ala Asp Val Cys Pro Leu
 20 25 30
 Thr Leu Gly Asn Met Val Ser Ala Leu Asp Arg Leu Gly Ser Arg Ala
 35 40 45
 Asp Gly Ile Val Pro Ile Phe Ile Ser Val Asp Pro Ala Arg Asp Thr
 50 55 60
 Pro Ala Leu Val Gly Gln Tyr Val Ala His Phe Ser Pro Arg Ile Val
 65 70 75 80
 Gly Leu Thr Gly Thr Ala Ala Gln Leu Ala Pro Val Leu Ala Glu Phe
 85 90 95
 His Ile Thr Ala Arg Ala Glu Pro Ala Ala His Asp Met Ala Ala Asp
 100 105 110
 Met Tyr Ala Val Asp His Ser Ala Leu Leu Tyr Leu Met Asp Gly Asn
 115 120 125
 Asn Arg Leu Leu Arg Val Met Ala Val Ser Ala Asp Ala Ala Ser Leu
 130 135 140
 Thr His Gln Leu Ala Ala Gly Leu Ala Gly Ala Arg Met Arg Pro
 145 150 155

<210> 703

<211> 390

<212> DNA

<213> Homo sapiens

<400> 703

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 attgagatgg cccgaacgat gcttgatgag tacaagactc cgcggaagtt ctggcctgaa
 120
 gccattgata ctgcttgta caccatcaac cgcgtttatc ttcacaaggt tttggagaaaa
 180
 acctcttatg agttcctaac tggttaagaaa cccaatgtaa gctatttcag agtatttggt
 240
 gctaggtgct ggatcaagga tcctcatcac acttcaaaa ttgcaccgaa agcatatgaa
 300
 gggtttatgc ttggttacgg aaaggattcg cactctaca gagtcttcaa cctctttcac
 360
 tataaagtgg ttcaaactgt ggaatgtgcgn
 390

<210> 704

<211> 130

<212> PRT

<213> Homo sapiens

<400> 704

Phe Ser Ala Pro Tyr Thr Pro Gln Gln Asn Gly Ile Ala Glu Arg Lys
 1 5 10 15
 Asn Ile Thr Leu Ile Glu Met Ala Arg Thr Met Leu Asp Glu Tyr Lys

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      20      25      30
Thr Pro Arg Lys Phe Trp Pro Glu Ala Ile Asp Thr Ala Cys His Thr
      35      40      45
Ile Asn Arg Val Tyr Leu His Lys Val Leu Glu Lys Thr Ser Tyr Glu
      50      55      60
Phe Leu Thr Gly Lys Lys Pro Asn Val Ser Tyr Phe Arg Val Phe Gly
65      70      75      80
Ala Arg Cys Trp Ile Lys Asp Pro His His Thr Ser Lys Phe Ala Pro
      85      90      95
Lys Ala His Glu Gly Phe Met Leu Gly Tyr Gly Lys Asp Ser His Ser
      100      105      110
Tyr Arg Val Phe Asn Leu Phe His Tyr Lys Val Val Gln Thr Val Asp
      115      120      125
Val Arg
      130

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<210> 705

<211> 513

<212> DNA

<213> Homo sapiens

<400> 705

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acgcgtattt cgtccaaatg attcaaatca aaacgccgcc gttaaaaacg atgcaggcga
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120
tacacaagtc tttatggacc aactgtagga gactccgtga gattaggaga tacgaacttg
180
tttgacaag ttgagaaaaga ctatgcaaat tatggggatg aagctacttt cgggtggcggga
240
aaatcaattc gtgatgggat ggctcaaaat cctaatgtga caagagatga taaaaatgta
300
gccgatttag ttttaactaa cgcattaatt attgattatg acaagattgt taaagcagat
360
atcggtatta aaaaagggtta tatttttaag attggtaaaag ctggaaaacc agatataatg
420
gataacgttg acatcatcat tggtgcaaca actgatatta ttgctgctga aggtaaaaat
480
gttactgccg gcggtatcga tacacacgtg cac
513

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<210> 706

<211> 140

<212> PRT

<213> Homo sapiens

<400> 706

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Met Ser Phe Lys Met Thr Gln Ser Gln Tyr Thr Ser Leu Tyr Gly Pro
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Thr Val Gly Asp Ser Val Arg Leu Gly Asp Thr Asn Leu Phe Ala Gln
      20      25      30
Val Glu Lys Asp Tyr Ala Asn Tyr Gly Asp Glu Ala Thr Phe Gly Gly
      35      40      45
Gly Lys Ser Ile Arg Asp Gly Met Ala Gln Asn Pro Asn Val Thr Arg

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      50              55              60
Asp Asp Lys Asn Val Ala Asp Leu Val Leu Thr Asn Ala Leu Ile Ile
65              70              75              80
Asp Tyr Asp Lys Ile Val Lys Ala Asp Ile Gly Ile Lys Asn Gly Tyr
      85              90              95
Ile Phe Lys Ile Gly Lys Ala Gly Asn Pro Asp Ile Met Asp Asn Val
      100             105             110
Asp Ile Ile Ile Gly Ala Thr Thr Asp Ile Ile Ala Ala Glu Gly Lys
      115             120             125
Ile Val Thr Ala Gly Gly Ile Asp Thr His Val His
      130             135             140

<210> 707
<211> 409
<212> DNA
<213> Homo sapiens

<400> 707
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gcacactaca cagtgcacag gtgaagccct caggggggcc tggagcaggg ccacctccct
120
gggggatccc caggtgccat ttcatggca gtgtctatgg acggtccccc ttggcatggg
180
gctgggtggc aatcctggct gtagctgcc cccctgcc tttttgctt cctccgaggg
240
cattgtgatc atcagtgta gtctgttggg aaggagagcc aggtcccoag gtttgggaaa
300
ggagttaggt ttcccagcct gtctggccat cccccccag cccagcccct cctgctgggt
360
gacgtgctca gttcggcccc tgctgtactg ggagggggct aggagcata
409

<210> 708
<211> 136
<212> PRT
<213> Homo sapiens

<400> 708
Met Leu Leu Ala Pro Ser Gln Tyr Ser Arg Gly Arg Thr Glu His Val
1              5              10              15
Thr Gln Gln Glu Gly Leu Gly Trp Gly Val Met Ala Arg Gln Ala Gly
20             25             30
Lys Pro Tyr Ser Phe Pro Lys Pro Gly Asp Leu Ala Leu Leu Pro Asn
35             40             45
Arg Leu Thr Leu Met Ile Thr Met Pro Ser Glu Gly Ser Lys Lys Gly
50             55             60
Arg Gly Trp Gln Leu Gln Pro Gly Leu Pro Pro Ser Thr Met Pro Arg
65             70             75             80
Gly Ala Val His Arg His Cys His Glu Asn Gly Thr Trp Gly Ser Pro
85             90             95
Arg Glu Val Ala Leu Leu Gln Asp Pro Leu Arg Ala Ser Pro Val His
100            105            110
Cys Val Val Cys Arg Leu Ser Pro Cys Leu Pro Gly Gln Asp Cys Leu

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115 120 125

Trp Trp Ser Glu Asp Ala Thr Arg
130 135

<210> 709
<211> 771
<212> DNA
<213> Homo sapiens

<400> 709
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tgaccacacc tgggccacgcg acgtgtgggtg cgccagcctc cccagcggat cacctcctcc
120
tccccctcca ggaggagagt ttctccgaag tccccatgag tgaagcaagc tcagcgaaag
180
acactccact ctttaggatg gagggagagg atgcccttgt gactcagtat cagagcaaa
240
ccagtgacca cgaaggttta ttgtctgacc ccttgagtga ccttcagttg gtctcagatt
300
ttaaattccc aatcatggcc gatctgaact taagccttcc ttccattcct gaagtcgcat
360
cggatgatga aagaatatag caggttgaag atgacggaga tcaggttgaa gatgatggag
420
agacagcaaa gtcgtcaact ctggacatag gagctttgtc cttgggcttg gtagtccctc
480
gtcctgagag gggaaagggg cccagtggcg aggcagatag gttggtagtg ggggagggcc
540
gtgtgtgatt caggctgcaa gacccccagg catctgtgac agctccttca gagcagacca
600
cagagtctcg aattcacaaa ccacatcttg gcaagagctc aagcttggtat aaacagctgc
660
caggccccag tggtggtgag gaagaaaaac cgatgggaaa tggggagtcca agccccctcc
720
ctggcacatc cctggacaat cctgtaccca gccctctccc ttctgagatc t
771

<210> 710
<211> 205
<212> PRT
<213> Homo sapiens

<400> 710
Met Ser Glu Ala Ser Ser Ala Lys Asp Thr Pro Leu Phe Arg Met Glu
1 5 10 15
Gly Glu Asp Ala Leu Val Thr Gln Tyr Gln Ser Lys Ala Ser Asp His
20 25 30
Glu Gly Leu Leu Ser Asp Pro Leu Ser Asp Leu Gln Leu Val Ser Asp
35 40 45
Phe Lys Ser Pro Ile Met Ala Asp Leu Asn Leu Ser Leu Pro Ser Ile
50 55 60
Pro Glu Val Ala Ser Asp Asp Glu Arg Ile Asp Gln Val Glu Asp Asp
65 70 75 80
Gly Asp Gln Val Glu Asp Asp Gly Glu Thr Ala Lys Ser Ser Thr Leu

	85		90		95
Asp	Ile	Gly	Ala	Leu	Ser
	100		105		110
Gly	Lys	Gly	Pro	Ser	Gly
	115		120		125
Leu	Cys	Asp	Phe	Arg	Leu
	130		135		140
Ser	Glu	Gln	Thr	Thr	Glu
	145		150		155
Ser	Ser	Ser	Leu	Asp	Lys
	165		170		175
Glu	Lys	Pro	Met	Gly	Asn
	180		185		190
Leu	Asp	Asn	Pro	Val	Pro
	195		200		205

<210> 711
 <211> 432
 <212> DNA
 <213> Homo sapiens

<400> 711
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 attctcctgt tttatatcta ctecccccta gggttcacct actccctcat ctctgagct
 120
 aatgtgcccgc ctttatttgc acttgcatgg aatatgatta tgaacacagt ttttatcatt
 180
 gatgaccacc ccgttatcag gttggcgatt cgtatgttgt tggaacacga ggggtataag
 240
 gtcggttggtg aaacggacaa cggttgtgac gcgatccaaa tggttcgcca atgcctgccg
 300
 gacctgatca tectggatat cagcatcccg aaactcgacg gcctcgaagt gctctgcoga
 360
 ttcaacgcca tgaacacatc catgaaaacc ctgattctta ccgccagag tcocagcttg
 420
 ttgcgcacgc gt
 432

<210> 712
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 712
 Met Ile Met Asn Thr Val Phe Ile Ile Asp Asp His Pro Val Ile Arg
 1 5 10 15
 Leu Ala Ile Arg Met Leu Leu Glu His Glu Gly Tyr Lys Val Val Gly
 20 25 30
 Glu Thr Asp Asn Gly Cys Asp Ala Ile Gln Met Val Arg Glu Cys Leu
 35 40 45
 Pro Asp Leu Ile Ile Leu Asp Ile Ser Ile Pro Lys Leu Asp Gly Leu
 50 55 60
 Glu Val Leu Cys Arg Phe Asn Ala Met Asn Thr Ser Met Lys Thr Leu

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65           70           75           80
Ile Leu Thr Ala Gln Ser Pro Thr Leu Phe Ala Thr Arg
           85           90

<210> 713
<211> 465
<212> DNA
<213> Homo sapiens

<400> 713
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atgcgcgatgg aaatgacoga cttcgccgcg gtgatcttca acccggtggc gcaggccaag
120
ttcgtgcata cggtcagcgc gggctacgtg gccggcgcca tgttcgtcat gtcgatcagc
180
gcctggtacc tgcacaaggg ccgccacacc gacctggcca agcgcctcat ggcggtcgcc
240
gccagcttcg gcctggcgctc ggcgctgtcg gtcgtcgtgc tgggtgacga aagcgggttat
300
ctcaccaccg aacaccagaa gatgaagatc gcggccatgg aatccatgtg gcacaccgag
360
ccggcgcccg cgtccttcaa cctgatcgcg ctgcccaacc aggcggaacg caagaacgac
420
tggcccatcg agattcccta cgtcatgngc ctcatcgga cgcgt
465

<210> 714
<211> 155
<212> PRT
<213> Homo sapiens

<400> 714
Ile Leu Ile Ala Asn Gly Gly Met Gln Asn Pro Val Gly Ala Val Phe
1           5           10           15
Asn Pro Asp Thr Met Arg Met Glu Met Thr Asp Phe Ala Ala Val Ile
20           25           30
Phe Asn Pro Val Ala Gln Ala Lys Phe Val His Thr Val Ser Ala Gly
35           40           45
Tyr Val Ala Gly Ala Met Phe Val Met Ser Ile Ser Ala Trp Tyr Leu
50           55           60
Leu Lys Gly Arg His Thr Asp Leu Ala Lys Arg Ser Met Ala Val Ala
65           70           75           80
Ala Ser Phe Gly Leu Ala Ser Ala Leu Ser Val Val Val Leu Gly Asp
85           90           95
Glu Ser Gly Tyr Leu Thr Thr Glu His Gln Lys Met Lys Ile Ala Ala
100          105          110
Met Glu Ser Met Trp His Thr Glu Pro Ala Pro Ala Ser Phe Asn Leu
115          120          125
Ile Ala Leu Pro Asn Gln Ala Glu Arg Lys Asn Asp Phe Ala Ile Glu
130          135          140
Ile Pro Tyr Val Met Xaa Leu Ile Gly Thr Arg
145          150          155

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<210> 715
 <211> 354
 <212> DNA
 <213> Homo sapiens

<400> 715
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 cagaccggcc tgctgcctca ggcaactgggt cgtttgcgcc aggcagcgcc gacggtggag
 120
 tgcaagttgg taccgggggt ttcctgggag ttgctcagcc aggtggagcgc aggcgagctg
 180
 gactcggcga tcatcattcg cccgcccttt gatttgccea aggagttgca cgtacaggta
 240
 ctgcgcaagg agccggtttgt gttgatcgtg cccaggcggc tcgggggtga tgacccggtg
 300
 caactgctcg aagctcatcc ccacgtgcgc tacgaccgcg ctctgtttgg cggg
 354

<210> 716
 <211> 118
 <212> PRT
 <213> Homo sapiens

<400> 716
 Xaa Pro Val Asp Ala Asn Glu Tyr Arg Gly Glu Leu Lys Val Gly Ala
 1 5 10 15
 Ile Thr Thr Ala Gln Thr Gly Leu Leu Pro Gln Ala Leu Val Arg Leu
 20 25 30
 Arg Gln Ala Ala Pro Thr Val Glu Cys Lys Leu Val Pro Gly Val Ser
 35 40 45
 Leu Glu Leu Leu Ser Gln Val Asp Ala Gly Glu Leu Asp Ser Ala Ile
 50 55 60
 Ile Ile Arg Pro Pro Phe Asp Leu Pro Lys Glu Leu His Val Gln Val
 65 70 75 80
 Leu Arg Lys Glu Pro Phe Val Leu Ile Val Pro Gln Ala Val Gly Gly
 85 90 95
 Asp Asp Pro Leu Gln Leu Leu Glu Ala His Pro His Val Arg Tyr Asp
 100 105 110
 Arg Ala Ser Phe Gly Gly
 115

<210> 717
 <211> 401
 <212> DNA
 <213> Homo sapiens

<400> 717
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 ccgttaagtc atctaaatag gccattctgt ggctctccat cagtaagaac caaatccata
 120
 ggagaagttg agcggatagt aatgcatcaa attgatgctg agaaaccgaa aaatgggaca
 180

atataatcaa gctgacaata ctgatcaaac cactcgcatg aaagctacta cgccttgacc
 240
 accaagcaga aaaacacaaat gaaatgctta aaaataaaat cgtccaaagt aaaaagctag
 300
 accaggtggt agccagatta aaaataggcc gctctagaaa atgaaaagaa atccaatgag
 360
 attcaacggc gtagcaccag cacagcaaca tagccactag t
 401

<210> 718
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 718
 Met Leu Leu Cys Trp Cys Tyr Ala Val Glu Ser His Trp Ile Ser Phe
 1 5 10 15
 His Phe Leu Glu Arg Pro Ile Phe Asn Leu Ala Thr Thr Trp Ser Ser
 20 25 30
 Phe Leu Leu Trp Thr Ile Leu Phe Leu Ser Ile Ser Leu Val Phe Ser
 35 40 45
 Ala Trp Trp Ser Ser Gly Ser Ser Phe His Ala Ser Gly Leu Ile Ser
 50 55 60
 Ile Val Ser Leu Ile Ile Leu Ser His Phe Ser Val Ser Gln His Gln
 65 70 75 80
 Phe Asp Ala Leu Leu Ser Ala Gln Leu Leu Trp Trp Ile Trp Phe Leu
 85 90 95
 Leu Met Glu Ser His Arg Met Ala Tyr Leu Asp Asp Leu Thr Ala Leu
 100 105 110
 Pro Gly Arg Arg Ala Leu Asn Glu Lys Leu Val Gly Leu Pro Lys Arg
 115 120 125
 Tyr Ala
 130

<210> 719
 <211> 685
 <212> DNA
 <213> Homo sapiens

<400> 719
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 ctcttggaag cggattttca taggcgctgc gcctctcata ttcaagcatc aaggcaatcc
 120
 aatctccctg cgttggttaac tgggcaaaag aaagacctct gcagtcacgc aacctcatcg
 180
 tgcaaatgcc gtggcgtggt caactctgac ggcctggaag ctgcagacct tgtcaaaagg
 240
 cctcgccgga aattcacctt tgatctcttt gcttgttcca actcttgtcc ctgagaatga
 300
 aactgtcttc tgagagtcca tcaatgcgac gctgactcgt gagaagtgcgt gaatcacgtc
 360
 gccatthttg agacctgcca acgcagctct ggaacctgccc aggcagcctt ccacaacacc
 420

agaacgcagc gacttttgcgt taaatccaag ctcaaacacc tcttgctcca caggcctgag
 480
 cataaaaagg tattctgcga cgggaaatgt aaagtctgag cttagggtgca gagtacgcgc
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 atcgatcagt gtctgatact gcttgctccg gacttctttg ccgagcaatg ggtatagcgt
 600
 ttccaaccaa gtggaagcag tcgtttgctc accctggcga ttccggcgag ttagggacat
 660
 gaccacgtca tcgatgggat ttgtc
 685

<210> 720

<211> 161

<212> PRT

<213> Homo sapiens

<400> 720

Met	Ser	Leu	Thr	Arg	Arg	Asn	Arg	Gln	Gly	Glu	Gln	Thr	Thr	Ala	Ser
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Thr	Trp	Leu	Lys	Thr	Leu	Tyr	Pro	Leu	Gly	Lys	Glu	Val	Ala	Asp	
		20					25				30				
Lys	Gln	Tyr	Gln	Thr	Leu	Ile	Asp	Gly	Gly	Thr	Leu	His	Leu	Ser	Ser
	35					40					45				
Asp	Phe	Thr	Phe	Pro	Val	Ala	Glu	Tyr	Leu	Phe	Met	Leu	Arg	Pro	Val
	50					55				60					
Glu	Gln	Glu	Val	Phe	Glu	Leu	Gly	Phe	Asn	Ala	Lys	Ser	Leu	Arg	Ser
	65				70				75					80	
Gly	Val	Val	Glu	Gly	Val	Leu	Ala	Gly	Ser	Arg	Ala	Ala	Leu	Ala	Gly
		85						90					95		
Leu	Gln	Asn	Gly	Asp	Val	Ile	Gln	His	Phe	Ser	Arg	Val	Ser	Val	Ala
	100						105					110			
Leu	Met	Asp	Ser	Gln	Lys	Thr	Val	Ser	Phe	Ser	Gly	Thr	Arg	Val	Gly
	115					120					125				
Gln	Asp	Lys	Glu	Ile	Lys	Gly	Glu	Phe	Arg	Pro	Arg	Ser	Phe	Asp	Lys
	130					135				140					
Val	Cys	Ser	Phe	Gln	Ala	Val	Arg	Val	Asp	His	Ala	Thr	Ala	Phe	Ala
	145				150					155				160	
Arg															

<210> 721

<211> 579

<212> DNA

<213> Homo sapiens

<400> 721

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 120
 aggaacgctc tcagggtggc tgaagtctgg atggatgaat ttaaaagcca cgtctactgg
 180
 catggaacat accaggagga ctcaggaatt gacattgggg acatcactgc aaggaaggct
 240

ctcaggaaac agctgcagtg caagaccttc cgggtggtacc tgggtcagcgt gtacccagag
 300
 atgaggatgt actccgacat cattgcctat ggagtgcctc agaattctct gaagactgat
 360
 ttgtgtcttg accagggggc agatacagag aatgtcccca tcatgtacat ctgccatggg
 420
 atgacgcctc agaacgtgta ctacacgagc agtcagcaga tccatgtggg cattctgagc
 480
 cccaccgtgg atgatgatga caaccgatgc ctggtgggac tcaacagccg gccccgggtc
 540
 atcgaatgca gctacgccaa agccaagagg atgaagctt
 579

<210> 722

<211> 193

<212> PRT

<213> Homo sapiens

<400> 722

Lys Leu Gly Ile Arg Val Trp Gln Cys Gly Gly Ser Val Glu Val Leu
 1 5 10 15
 Pro Cys Ser Arg Ile Ala His Ile Glu Arg Ala His Lys Pro Tyr Thr
 20 25 30
 Glu Asp Leu Thr Ala His Val Arg Arg Asn Ala Leu Arg Val Ala Glu
 35 40 45
 Val Trp Met Asp Glu Phe Lys Ser His Val Tyr Trp His Gly Thr Tyr
 50 55 60
 Gln Glu Asp Ser Gly Ile Asp Ile Gly Asp Ile Thr Ala Arg Lys Ala
 65 70 75 80
 Leu Arg Lys Gln Leu Gln Cys Lys Thr Phe Arg Trp Tyr Leu Val Ser
 85 90 95
 Val Tyr Pro Glu Met Arg Met Tyr Ser Asp Ile Ile Ala Tyr Gly Val
 100 105 110
 Leu Gln Asn Ser Leu Lys Thr Asp Leu Cys Leu Asp Gln Gly Pro Asp
 115 120 125
 Thr Glu Asn Val Pro Ile Met Tyr Ile Cys His Gly Met Thr Pro Gln
 130 135 140
 Asn Val Tyr Tyr Thr Ser Ser Gln Gln Ile His Val Gly Ile Leu Ser
 145 150 155 160
 Pro Thr Val Asp Asp Asp Asn Arg Cys Leu Val Asp Val Asn Ser
 165 170 175
 Arg Pro Arg Leu Ile Glu Cys Ser Tyr Ala Lys Arg Met Lys
 180 185 190
 Leu

<210> 723

<211> 384

<212> DNA

<213> Homo sapiens

<400> 723

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 60

ctcaacgaaa tgctctcgct taaacggtgc gaaggaaccc cacogcaatg gcgcttatto
 120
 cgcgaggggg attaccaaat gcgcattgat acgcgctccg gaacgcctac gctgatgctt
 180
 accgtacaaa gtgtaaccga caaacctgtt acggacgtca ctgcacaatg tcctaaatgg
 240
 gacggcaagc cctccaccct tgacgtaacg aatacattcc cggaaggctc cgtcgtagca
 300
 gactttctaca gcaagcaaac cgctatgggt cagcaaggta aaatcacact tcagcctgcc
 360
 gctaacagca atggcctgct gctg
 384

<210> 724
 <211> 128
 <212> PRT
 <213> Homo sapiens

<400> 724
 Thr Arg Pro Leu Thr Leu Ser Phe Asp Asn Ala Cys Trp Gln Pro Thr
 1 5 10 15
 Glu Ala Val Lys Leu Asn Glu Met Leu Ser Leu Lys Pro Cys Glu Gly
 20 25 30
 Thr Pro Pro Gln Trp Arg Leu Phe Arg Glu Gly Asp Tyr Gln Met Arg
 35 40 45
 Ile Asp Thr Arg Ser Gly Thr Pro Thr Leu Met Leu Thr Val Gln Ser
 50 55 60
 Val Thr Asp Lys Pro Val Thr Asp Val Thr Arg Gln Cys Pro Lys Trp
 65 70 75 80
 Asp Gly Lys Pro Leu Thr Leu Asp Val Thr Asn Thr Phe Pro Glu Gly
 85 90 95
 Ser Val Val Arg Asp Phe Tyr Ser Lys Gln Thr Ala Met Val Gln Gln
 100 105 110
 Gly Lys Ile Thr Leu Gln Pro Ala Ala Asn Ser Asn Gly Leu Leu Leu
 115 120 125

<210> 725
 <211> 521
 <212> DNA
 <213> Homo sapiens

<400> 725
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 cctggtagaac agcttcccag gtgtgcattt agggcctcct agggatcatc aaagttttta
 120
 gaaaataggt ttctctcttc cacaggcatg gagaaggaag gaaattttgc actggccttt
 180
 gggaagctga agaagagctg gggggaggct tgttctgaca aaatagtac ttctctccctg
 240
 cttgaaatgt cccacagaag gctgtttctg gttcacattt gccctcttag gtccactccc
 300
 tccccttcat cctgctcact gccagagaga ctatgctggg agtggtgcat cgggtgtctc
 360

caggcccttt taggtcaag gtgttcattc cctggtcct tccctgcat gtctttgttc
 420
 cttctccct cttcccatc ccagcagcca cctctctct tccaccagac ctgggaacca
 480
 tcattcccaac cacaatcacc ccgtggttct attacacgcy t
 521

<210> 726
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 726
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 1 5 10 15
 Ser Trp Gly Glu Ala Cys Ser Asp Lys Ile Val Thr Leu Ser Leu Leu
 20 25 30
 Glu Met Ser His Arg Arg Leu Phe Leu Val His Ile Cys Pro Ser Arg
 35 40 45
 Ser Thr Pro Ser Pro Ser Ser Cys Ser Leu Pro Glu Arg Leu Cys Trp
 50 55 60
 Glu Trp Cys Ile Gly Gly Leu Gln Ala Leu Leu Gly Ser Arg Cys Ser
 65 70 75 80
 Phe Pro Gly Ser Phe Pro Ala Met Ser Leu Phe Leu Pro Pro Ser Phe
 85 90 95
 Pro Ser Gln Gln Pro Pro Ser Ser Phe His Gln Thr Trp Glu Pro Ser
 100 105 110
 Ser Gln Pro Gln Ser Pro Arg Gly Ser Ile Thr Arg
 115 120

<210> 727
 <211> 629
 <212> DNA
 <213> Homo sapiens

<400> 727
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<210> 728
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<212> PRT

<213> Homo sapiens

<400> 730

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 Val Thr Arg Leu Pro Ser Pro Thr Ser Pro Phe Ser Ser Leu Ser Gln
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Trp Leu Asn Gln Pro Thr Gly Phe Tyr Ala Ser Ser Ser Val Gln Asp
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Phe Ser Arg Pro Pro Pro Gln Leu Val Ser Thr Ser Asn Arg Ala Tyr
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Met Arg Asn Pro Ser Ser Ser Val Pro Pro Pro Ser Ala Gly Ser Val
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<212> PRT

<213> Homo sapiens

<400> 734

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Lys	Leu	Leu	Leu	Gln	Pro	Ser	Pro	Tyr	Val	Arg	Lys	Lys	Ala	Ile	Leu
145				150					155					160	
Thr	Ala	Val	His	Met	Ile	Arg	Lys	Val	Pro	Glu	Leu	Ser	Ser	Val	Phe
			165					170					175		
Leu	Pro	Pro	Cys	Ala	Gln	Leu	Leu	His	Glu	Arg	His	His	Gly	Ile	Leu
			180				185					190			
Leu	Gly	Thr	Ile	Thr	Leu	Ile	Thr	Glu	Leu	Cys	Glu	Arg	Ser	Pro	Ala
		195				200					205				
Ala	Leu	Arg	His	Phe	Arg	Lys	Val	Val	Pro	Gln	Leu	Val	His	Ile	Leu
	210					215					220				
Arg	Thr	Leu	Val	Thr	Met	Gly	Tyr	Ser	Thr	Glu	His	Ser	Ile	Ser	Gly
225				230						235				240	
Val	Ser	Asp	Pro	Phe	Leu	Gln	Val	Gln	Ile	Leu	Arg	Leu	Leu	Arg	Ile
			245						250					255	
Leu	Gly	Arg	Asn	His	Glu	Glu	Ser	Ser	Glu	Thr	Met	Asn	Asp	Leu	Leu
			260				265					270			
Ala	Gln	Val	Ala	Thr	Asn	Thr	Asp	Thr	Ser	Arg	Asn	Ala	Gly	Asn	Ala

```

                275                280                285
Val Leu Phe Glu Thr Val Leu Thr Ile Met Asp Ile Arg Ser Ala Ala
  290                295                300
Gly Leu Arg Val Leu Ala Val Asn Ile Leu Gly Arg Phe Leu Leu Asn
  305                310                315                320
Ser Asp Arg Asn Ile Arg Tyr Val Ala Leu Thr Ser Leu Leu Arg Leu
                325                330                335
Val Gln Ser Asp His Ser Ala Val Gln Arg His Arg Pro Thr Val Val
                340                345                350
Glu Cys Leu Arg Glu Thr Asp Ala Ser Leu Ser Arg
  355                360

<210> 735
<211> 597
<212> DNA
<213> Homo sapiens

<400> 735
gtcgactagc caaacgccg gggaaagtct tgtaccacgc atcctggttt atgcggatct
60
catcgccacc atggactcgc gcaatctgga aaccgccaac cttattccag aaaaaataat
120
tgcttggtgt cctcgatccc gctctgacgc cccactggac cgtcaacc aggacatcct
180
cagtgccatc cagcagctgg ctgcacgcgt ggcaactccc atctctgtgg tgggtgccac
240
agcgcgcgac attctgtcga cacacgtgtt cggtatcgag accggacgtg ccacgcctga
300
cgtggatttc gccgttgccg tagaacattg gccgcagttc gaaaacatca agcagcacc
360
gctagccaac gaccatttgc actctgcgcg cagcatcacc catcgactgc tctatgcgac
420
gagcgacaac acgatcgccc ggccaatcga tctcatccca ttcgcgcgca tcgaacagcc
480
gccagccacc atcaaatggc cgcccgacat ggctgtcatg atgaatgttg ctggctacgc
540
agatgcctgg cgggcgcgag tcgaagtaga gtttgtgccc gggcgacgac tacgcgt
597

<210> 736
<211> 175
<212> PRT
<213> Homo sapiens

<400> 736
Met Asp Ser Arg Asn Leu Glu Thr Ala Asn Leu Ile Pro Glu Lys Ile
  1                5                10                15
Ile Ala Trp Cys Pro Arg Ser Arg Ser Asp Arg Pro Leu Asp Arg Ser
  20                25                30
Thr Gln Asp Ile Leu Ser Ala Ile His Asp Val Ala Ala Pro Leu Ala
  35                40                45
Leu Pro Ile Phe Val Val Gly Ala Thr Ala Arg Asp Ile Leu Leu Thr
  50                55                60
His Val Phe Gly Ile Glu Thr Gly Arg Ala Thr Leu Asp Val Asp Phe

```

```

65              70              75              80
Ala Val Ala Val Glu His Trp Pro Gln Phe Glu Asn Ile Lys Gln His
              85              90              95
Leu Leu Ala Asn Asp His Phe Asp Ser Ala Ala Ser Ile Thr His Arg
              100              105              110
Leu Leu Tyr Arg Thr Ser Asp Asn Thr Ile Ala Arg Pro Ile Asp Leu
              115              120              125
Ile Pro Phe Gly Gly Ile Glu Gln Pro Pro Ala Thr Ile Lys Trp Pro
              130              135              140
Pro Asp Met Ala Val Met Met Asn Val Ala Gly Tyr Ala Asp Ala Trp
145              150              155              160
Arg Ala Ala Val Glu Val Glu Phe Val Pro Gly Arg Ser Ile Arg
              165              170              175

```

<210> 737

<211> 497

<212> DNA

<213> Homo sapiens

<400> 737

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ntgcgcctgg ccaattccgg cgccatcctc gggcacgata tggggaaaac ctccatgggt
60
cgcgccggca tcgttgggta cggatacgat cccaaccctc acgccgacgg tgccgaccta
120
caccctgccc tgtcctggat cagccacgct acctctgcta aaactgtcag tgtgggggat
180
accatcggt acggcagaac atggacagcc agcgaaacga caaaaatcgc caccgtccca
240
gtcgggttacg ccgacggact gtcocgagga ctgtcaaata aaggacacgt tctcattaga
300
gggtccgttc atcccacgtt cggtcggata tgcattggacc aattcatggt cgatcttggc
360
ccgatttcga acgtcacggt gggagatgag gtggtgtctc ttggaaccca ggaggacgaa
420
actctgacgg ctgatgacat ggccgaactc ctcggaacca ttagctacga gatcacttgc
480
gccatttcca aacgcgt
497

```

<210> 738

<211> 165

<212> PRT

<213> Homo sapiens

<400> 738

```

Xaa Arg Leu Ala Asn Ser Gly Ala Ile Leu Gly His Asp Leu Gly Lys
1              5              10              15
Thr Ser Met Val Arg Ala Gly Ile Val Gly Tyr Gly Tyr Asp Pro Asn
              20              25              30
Pro His Ala Asp Arg Ala Asp Leu His Pro Ala Leu Ser Trp Ile Ser
              35              40              45
His Val Thr Phe Val Lys Thr Val Ser Val Gly Asp Thr Ile Gly Tyr
              50              55              60
Gly Arg Thr Trp Thr Ala Ser Glu Thr Thr Lys Ile Ala Thr Val Pro

```

```

65              70              75              80
Val Gly Tyr Ala Asp Gly Leu Ser Arg Gly Leu Ser Asn Lys Gly His
                        85              90              95
Val Leu Ile Arg Gly Ser Val His Pro Ile Val Gly Arg Ile Cys Met
                        100             105             110
Asp Gln Phe Met Val Asp Leu Gly Pro Asp Ser Asn Val Thr Val Gly
                        115             120             125
Asp Glu Val Val Leu Ile Gly Thr Gln Glu Asp Glu Thr Leu Thr Ala
                        130             135             140
Asp Asp Met Ala Glu Leu Leu Gly Thr Ile Ser Tyr Glu Ile Thr Cys
145              150              155              160
Ala Ile Ser Lys Arg
                        165

```

```

<210> 739
<211> 438
<212> DNA
<213> Homo sapiens

```

```

<400> 739
cggctgcggg aagagcgggc gcacgcgctc aagaccaagg aaaagctggc acagaccggc
60
acggcctcat cagcagctgt gggctcaggc cccctcccg aggcgaggag ggcgtggcgg
120
cagagcagcg gggaggagga gctgcagctc cagctggccc tggccatgag caaggaggag
180
gccgaccagc ccccgctctg cgcccccgag gacgacgccc agctccagct ggcccttagt
240
ttgagccgag aagagcatga taaggaggag cggatccgtc gcggggatga cctgcgggctg
300
cagatggcaa tcgaggagag caagaggagg actgggggca aggaggagtc gtccctcatg
360
gaccttgctg acgtcttcac gccccagct cctgccccga ccacagaccc ctggggggggc
420
ccagcaccca tggtctgt
438

```

```

<210> 740
<211> 146
<212> PRT
<213> Homo sapiens

```

```

<400> 740
Arg Leu Arg Glu Glu Arg Ala His Ala Leu Lys Thr Lys Glu Lys Leu
1              5              10              15
Ala Gln Thr Ala Thr Ala Ser Ser Ala Ala Val Gly Ser Gly Pro Pro
20             25             30
Pro Glu Ala Glu Gln Ala Trp Pro Gln Ser Ser Gly Glu Glu Glu Leu
35             40             45
Gln Leu Gln Leu Ala Leu Ala Met Ser Lys Glu Glu Ala Asp Gln Pro
50             55             60
Pro Ser Cys Gly Pro Glu Asp Asp Ala Gln Leu Gln Leu Ala Leu Ser
65              70              75              80
Leu Ser Arg Glu Glu His Asp Lys Glu Glu Arg Ile Arg Arg Gly Asp

```

```

      85              90              95
Asp Leu Arg Leu Gln Met Ala Ile Glu Glu Ser Lys Arg Glu Thr Gly
      100              105              110
Gly Lys Glu Glu Ser Ser Leu Met Asp Leu Ala Asp Val Phe Thr Pro
      115              120              125
Pro Ala Pro Ala Pro Thr Thr Asp Pro Trp Gly Gly Pro Ala Pro Met
      130              135              140
Ala Ala
145

<210> 741
<211> 726
<212> DNA
<213> Homo sapiens

<400> 741
gcctctctcc gaccgcgttg ttgtaaggat gtcgcgacgg tgcgcaaaaa tgaatatgtg
60
aatttgccgg tcatctgcct cgtcgggccc actgctagcg gaaaatcagg gctagcggtg
120
cgagtggtgcc gccgcttgta gtctgatgag caccgcccg aaattattaa tactgactcg
180
atggtggtgt atcgcgggat ggacattggc actgccccc ctacactcg cgagcagcgc
240
acggtagtgc atcacctggt gtcgattctt gatgtgactg tgccctcttc gctagtactg
300
atgcagacgc tggcccgta tgccgtcgag gattgtctgt cgcgtggtgt catccctgtc
360
ttggtggggg ggtctgcgt gtacaccaag gccatcatt acgaaatgac catcccgcca
420
actgatccgg aagtgagggc tcggtggcag gagaagctag atgccgaggg gccgcgagtt
480
ctgcatgacg agcttgcccg tcgcgatccc aaggcggctg agtcaatctt gcccggaac
540
ggcaggcgaa tcgttctgt cctcgaaagt ttattgaccc tgacagggtc ctttactgcc
600
accgatcccc gacgggaccc tccactggcc aagacgggtc aaatgggctt agaactgtcg
660
cgcaaagaca tagaccagcg tattgccgat cgggttgacc agatgtgggc atacggtttc
720
gtcgac
726

<210> 742
<211> 242
<212> PRT
<213> Homo sapiens

<400> 742
Ala Ser Leu Arg Pro Arg Cys Cys Lys Asp Val Ala Thr Val Arg Lys
1 5 10 15
Asn Glu Tyr Val Asn Leu Pro Val Ile Cys Leu Val Gly Pro Thr Ala
20 25 30
Ser Gly Lys Ser Gly Leu Ala Val Arg Val Cys Arg Arg Leu Tyr Val

```

```

      35              40              45
Asp Glu His Pro Ala Glu Ile Ile Asn Thr Asp Ser Met Val Val Tyr
  50              55              60
Arg Gly Met Asp Ile Gly Thr Ala Thr Pro Thr Leu Arg Glu Gln Arg
  65              70              75              80
Thr Val Val His His Leu Val Ser Ile Leu Asp Val Thr Val Pro Ser
      85              90              95
Ser Leu Val Leu Met Gln Thr Leu Ala Arg Asp Ala Val Glu Asp Cys
  100              105              110
Leu Ser Arg Gly Val Ile Pro Val Leu Val Gly Gly Ser Ala Leu Tyr
  115              120              125
Thr Lys Ala Ile Ile Asp Glu Met Ser Ile Pro Pro Thr Asp Pro Glu
  130              135              140
Val Arg Ala Arg Trp Gln Glu Lys Leu Asp Ala Glu Gly Pro Arg Val
  145              150              155              160
Leu His Asp Glu Leu Ala Arg Arg Asp Pro Lys Ala Ala Glu Ser Ile
      165              170              175
Leu Pro Gly Asn Gly Arg Arg Ile Val Ser Cys Pro Arg Ser Leu Leu
  180              185              190
Thr Leu Thr Gly Ser Phe Thr Ala Thr Asp Pro Arg Arg Asp Pro Pro
  195              200              205
Leu Ala Lys Thr Val Gln Met Gly Leu Glu Leu Ser Arg Lys Asp Ile
  210              215              220
Asp Gln Arg Ile Ala Asp Arg Val Asp Gln Met Trp Ala Tyr Gly Phe
  225              230              235              240
Val Asp

```

<210> 743

<211> 430

<212> DNA

<213> Homo sapiens

<400> 743

```

naaaaaaagtg atggtttcgg atctgtggcc agtcgtcttg caagaaatca ttatgacgtg
  60
gatgagggca acagcancat tcatgttaat caagacattg cgcgcagaac agggacggga
  120
aagcttattg tacgagtgtg cccggcgcac gtgtactcag aggagcccca tggcactatt
  180
tcgctggagt acgcagcgtg tctggagtgt ggcacttgct tggcgggtgc tgcgccaggg
  240
tcgcttgaat ggcactatcc cgcaggtgca atgggtattt cgttcagaga aggatgaagt
  300
cctgtggggc gactgtaaaag cgacatggcc gtcgctcggt aggaggaatt gtgtgtccg
  360
caccaaatag tgctcaggat gaagttcgtc atggaaatcc ggctccaacc gtttcgggag
  420
ctggtcgcga
  430

```

<210> 744

<211> 98

<212> PRT

<213> Homo sapiens

<400> 744

Xaa Lys Ser Asp Gly Phe Gly Ser Val Ala Ser Arg Leu Ala Arg Asn
 1 5 10 15
 His Tyr Asp Val Asp Glu Gly Asn Ser Xaa Ile His Val Asn Gln Asp
 20 25 30
 Ile Ala Arg Arg Thr Gly Thr Gly Lys Leu Leu Val Arg Val Cys Pro
 35 40 45
 Ala His Val Tyr Ser Glu Glu Pro Asp Gly Thr Ile Ser Val Glu Tyr
 50 55 60
 Ala Ala Cys Leu Glu Cys Gly Thr Cys Leu Ala Val Ala Ala Pro Gly
 65 70 75 80
 Ser Leu Glu Trp His Tyr Pro Ala Gly Ala Met Gly Ile Ser Phe Arg
 85 90 95
 Glu Gly

<210> 745

<211> 362

<212> DNA

<213> Homo sapiens

<400> 745

cggcgcgattg aagcgtcgtc gcggtttgag tcggtgatgg atgcgggtgga cgggtgcttcg
 60
 gcgtcgtggt ggcccatggc gcggtatttc atcgccgagc ttgaacgcag cagcgagttg
 120
 tatgagcagg cggcgtttac ccgcgatctg gaaagctcgc tgatcaaggg cctgatccctc
 180
 gccccgccga acaactactc cgaagaactg cgcgacgtac tcggcgtgaa gtcgccgcat
 240
 tacttgattc gcgcgcggca gtacatccac gacaacgccc gcgaagccgt gcactctggaa
 300
 gacctggaaa ccgctgccgg ggtatcgcgg ttcaagttgt tcgatgcgtt tcgcaaatac
 360
 tt
 362

<210> 746

<211> 108

<212> PRT

<213> Homo sapiens

<400> 746

Met Asp Ala Val Asp Gly Ala Ser Ala Ser Trp Trp Arg Met Ala Arg
 1 5 10 15
 Tyr Phe Ile Ala Glu Leu Glu Arg Ser Ser Glu Leu Tyr Glu Gln Ala
 20 25 30
 Ala Phe Thr Arg Asp Leu Glu Ser Ser Leu Ile Lys Gly Leu Ile Leu
 35 40 45
 Ala Gln Pro Asn Asn Tyr Ser Glu Glu Leu Arg Asp Val Leu Gly Val
 50 55 60
 Lys Leu Pro His Tyr Leu Ile Arg Ala Arg Gln Tyr Ile His Asp Asn

```

65              70              75              80
Ala Arg Glu Ala Val His Leu Glu Asp Leu Glu Thr Ala Ala Gly Val
              85              90              95
Ser Arg Phe Lys Leu Phe Asp Ala Phe Arg Lys Tyr
              100              105

```

```

<210> 747
<211> 416
<212> DNA
<213> Homo sapiens

```

```

<400> 747
naccggttga tcgccgccga ccgtttcatc ccgcaatcac ccgacatggc ggcctatattt
60
ctgaatgccg atggcacgcc taaagccacc ggcacgctgc tcaagaaccc agcgctggcc
120
gccgtgttca aacgtatcgc caaggaagga ccggacgcgc tgtaccacgg gccgattgcc
180
cacgagatcg cgcgcaaggt tcagggaac cgcaatgcgg gcagcctgtc gcaagcggac
240
ctcaaggctt acaccgccaa ggaacgcacg ccgctgtgca ccgactacaa gcaatatcag
300
gtgtgcggca tgccacgcgc gtcgtcaggc gggattgcgg tggcgagat cctcggcacg
360
ctgcaggccg tggaagcccg cgaccacgc ctggccatcg ccccatgaa accgggt
416

```

```

<210> 748
<211> 138
<212> PRT
<213> Homo sapiens

```

```

<400> 748
Xaa Ala Leu Ile Ala Ala Asp Arg Phe Ile Pro Gln Ser Pro Asp Met
1           5           10           15
Ala Ala Tyr Phe Leu Asn Ala Asp Gly Thr Pro Lys Ala Thr Gly Thr
20          25          30
Leu Leu Lys Asn Pro Ala Leu Ala Ala Val Phe Lys Arg Ile Ala Lys
35          40          45
Glu Gly Pro Asp Ala Leu Tyr His Gly Pro Ile Ala Asp Glu Ile Ala
50          55          60
Arg Lys Val Gln Gly Asn Arg Asn Ala Gly Ser Leu Ser Gln Ala Asp
65          70          75          80
Leu Lys Ala Tyr Thr Ala Lys Glu Arg Thr Pro Leu Cys Thr Asp Tyr
85          90          95
Lys Gln Tyr Gln Val Cys Gly Met Pro Pro Pro Ser Ser Gly Gly Ile
100         105         110
Ala Val Ala Gln Ile Leu Gly Thr Leu Gln Ala Val Glu Ala Arg Asp
115         120         125
Pro Arg Leu Ala Ile Ala Pro Met Lys Pro
130         135

```

```

<210> 749
<211> 1211

```

<212> DNA

<213> Homo sapiens

<400> 749

nagtcctaga cccagacccc gctcagaccc tccctgccagg tgacagccgc caagatgggg
 60
 tcttgggccc tgcctgtggcc tccctctgtg ttccaccgggc tgcctgtccg acccccgggg
 120
 accatggccc agggccagta ctgctctgtg aacaaggaca tctttgaagt agaggagaaac
 180
 acaaatgtca ccgagccgct ggtggacatc caggtcccgagg agggccaggga ggtgacctc
 240
 ggagccctgt ccccccctt tgcatttcgg atccaggga accagctgtt tetcaacgtg
 300
 actcctgatt acgaggagaa gtcaactgctt gaggtccagc tgctgtgtca gagcggaggc
 360
 acattggtga cccagctaag ggtgttcctg tcagtgctgg acgtcaatga caatgcccc
 420
 gaattccctt ttaagaccaa ggagataagg gtggaggagg acacgaaagt gaaatccacc
 480
 gtcatccccc agacgcaact gcaggctgag gaccgcgaca aggacgacat tctgttttac
 540
 accctccagg aaatgacagc aggtgccagt gactacttct ccttggtgag tgtaaacctg
 600
 ccgcgccctga ggtcggaccg gccctcggac ttctacgagc ggccgaacat gacctcttg
 660
 ctgctggtgc gggacactcc gggggagaat gtggaaccca gccacactgc caccgccaca
 720
 ctagtgtgta acgtggtgct cggcgacctg cggcccccgt ggttccctgc ctgcaccttc
 780
 tcagatggct acgtctgcat tcaagctcag taccacgggg ctgtccccac gggggacata
 840
 ctgccatctc cctcctgctt gcgtcccgga cccatctacg ctgaggacgg agaccggcg
 900
 atcaaccagc ccatcatcta cagcatcttt aggggaaacg tgaatggtac attcatcctc
 960
 caccagactc cgggcaacct caccgtggcc agggagtgtc ccagcccatc gaccttccct
 1020
 ctgctggtga agggccaaca ggccgacctt gcccgctact cagtgaacca ggtcaacgtg
 1080
 gagggtgtgt gctgcggccg ggagcccgcc ccgcttcccc cagagcctgt atcgtggcac
 1140
 cgtggcgctg ggcgctggag cgggcgttgt ggtcaaggat gcagctgccc cttttcagcc
 1200
 tctgaggatc c
 1211

<210> 750

<211> 385

<212> PRT

<213> Homo sapiens

<400> 750

Met Gly Ser Trp Ala Leu Leu Trp Pro Pro Leu Leu Phe Thr Gly Leu

1	5	10	15
Leu Val Arg Pro	Pro Gly Thr Met Ala Gln Ala Gln Tyr Cys Ser Val		
	20	25	30
Asn Lys Asp Ile Phe Glu Val Glu Asn Thr Asn Val Thr Glu Pro			
	35	40	45
Leu Val Asp Ile His Val Pro Glu Gly Gln Glu Val Thr Leu Gly Ala			
	50	55	60
Leu Ser Thr Pro Phe Ala Phe Arg Ile Gln Gly Asn Gln Leu Phe Leu			
65	70	75	80
Asn Val Thr Pro Asp Tyr Glu Glu Lys Ser Leu Leu Glu Ala Gln Leu			
	85	90	95
Leu Cys Gln Ser Ser Gly Gly Thr Leu Val Thr Gln Leu Arg Val Phe Val			
	100	105	110
Ser Val Leu Asp Val Asn Asp Asn Ala Pro Glu Phe Pro Phe Lys Thr			
	115	120	125
Lys Glu Ile Arg Val Glu Glu Asp Thr Lys Val Asn Ser Thr Val Ile			
	130	135	140
Pro Glu Thr Gln Leu Gln Ala Glu Asp Arg Asp Lys Asp Asp Ile Leu			
145	150	155	160
Phe Tyr Thr Leu Gln Glu Met Thr Ala Gly Ala Ser Asp Tyr Phe Ser			
	165	170	175
Leu Val Ser Val Asn Arg Pro Ala Leu Arg Leu Asp Arg Pro Leu Asp			
	180	185	190
Phe Tyr Glu Arg Pro Asn Met Thr Phe Trp Leu Leu Val Arg Asp Thr			
	195	200	205
Pro Gly Glu Asn Val Glu Pro Ser His Thr Ala Thr Ala Thr Leu Val			
	210	215	220
Leu Asn Val Val Pro Ala Asp Leu Arg Pro Pro Trp Phe Leu Pro Cys			
225	230	235	240
Thr Phe Ser Asp Gly Tyr Val Cys Ile Gln Ala Gln Tyr His Gly Ala			
	245	250	255
Val Pro Thr Gly His Ile Leu Pro Ser Pro Leu Val Leu Arg Pro Gly			
	260	265	270
Pro Ile Tyr Ala Glu Asp Gly Asp Arg Gly Ile Asn Gln Pro Ile Ile			
	275	280	285
Tyr Ser Ile Phe Arg Gly Asn Val Asn Gly Thr Phe Ile Ile His Pro			
	290	295	300
Asp Ser Gly Asn Leu Thr Val Ala Arg Ser Val Pro Ser Pro Met Thr			
305	310	315	320
Phe Leu Leu Leu Val Lys Gly Gln Gln Ala Asp Leu Ala Arg Tyr Ser			
	325	330	335
Val Thr Gln Val Thr Val Glu Gly Cys Gly Cys Gly Arg Glu Pro Ala			
	340	345	350
Pro Leu Pro Pro Glu Pro Val Ser Trp His Arg Gly Ala Trp Arg Trp			
	355	360	365
Ser Gly Arg Cys Gly Gln Gly Cys Ser Cys Pro Phe Ser Ala Ser Glu			
	370	375	380

Asp
385

<210> 751

<211> 345

<212> DNA

<213> Homo sapiens

<400> 751
 cgcgtcgcgg tcatgtcaa cgacatgagc gaggtcaaca tcgacgcggc gctggtggcg
 60
 gcaggcggcg ggctgtcgcg caccgaggag aagctcgtcg agatgtcgaa cggctgcac
 120
 tgctgcacgc tgcgcgacga cctgatgcag gaagtggcga gactggcggg cgaaggccgc
 180
 ttcatgcgc tggtcatcga gacacccggc gtgtccgagc cgatgcgggt cgcgcgccacg
 240
 ttcatattcc gtgaccagga cggcgtctcg ctgcgcgacg tcgcgcggct ggataccatg
 300
 gtcaccgtcg tcgacgcgc gtccttctcg cgcgactacg gctcg
 345

<210> 752
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 752
 Arg Val Ala Val Ile Val Asn Asp Met Ser Glu Val Asn Ile Asp Ala
 1 5 10 15
 Ala Leu Val Ala Ala Gly Gly Gly Leu Ser Arg Thr Glu Glu Lys Leu
 20 25 30
 Val Glu Met Ser Asn Gly Cys Ile Cys Thr Leu Arg Asp Asp Leu
 35 40 45
 Met Gln Glu Val Ala Arg Leu Ala Gly Glu Gly Arg Phe Asp Ala Leu
 50 55 60
 Val Ile Glu Ser Thr Gly Val Ser Glu Pro Met Pro Val Ala Ala Thr
 65 70 75 80
 Phe Asp Phe Arg Asp Gln Asp Gly Val Ser Leu Ala Asp Val Ala Arg
 85 90 95
 Leu Asp Thr Met Val Thr Val Val Asp Ala Ala Ser Phe Leu Arg Asp
 100 105 110
 Tyr Gly Ser
 115

<210> 753
 <211> 352
 <212> DNA
 <213> Homo sapiens

<400> 753
 gcgcgccagt acgccaagac cgtccgcaag gaccgcaagg gcgaacggcg gcgtcggggc
 60
 gcgtcggact agtccacgat gcatccgaac cgcgccttcc gctttgccga tgatgtctcg
 120
 atgctcgatt tcgcggccaa gcgagccttt cgcgcacatct tcgtgagcac gcccgagggg
 180
 cctatggtag cgcgatgccc ggttacgccc ttgcagcggag ccttcgcgtt ccattgcgcg
 240
 cgcgggcaatc ggatcgcgcg gcacctggat ggcgcgacgc tgctgtctcag catcagcgcg
 300

accgacggct atatacagccc gagctgggtac gccgacccgc agggaccaca gt
352

<210> 754

<211> 91

<212> PRT

<213> Homo sapiens

<400> 754

Met	His	Pro	Asn	Arg	Ala	Phe	Arg	Phe	Ala	Asp	Asp	Val	Ser	Met	Leu
1				5					10					15	
Asp	Phe	Ala	Ala	Lys	Arg	Ala	Phe	Ala	His	Ile	Phe	Val	Ser	Thr	Pro
		20						25				30			
Glu	Gly	Pro	Met	Val	Ala	His	Ala	Pro	Val	Thr	Pro	Phe	Asp	Gly	Ala
		35				40						45			
Phe	Arg	Phe	His	Val	Ala	Arg	Gly	Asn	Arg	Ile	Ala	Arg	His	Leu	Asp
	50					55				60					
Gly	Ala	Thr	Leu	Leu	Leu	Ser	Ile	Ser	Ala	Thr	Asp	Gly	Tyr	Ile	Ser
65				70					75					80	
Pro	Ser	Trp	Tyr	Ala	Asp	Pro	Gln	Gly	Pro	Gln					
				85					90						

<210> 755

<211> 301

<212> DNA

<213> Homo sapiens

<400> 755

tgggatgcag ggtctttctt ctccaaggat ttcattcctg gagggagaaa agggcccccag
60
ctgtctgccca tcaaaccggg ttgccgggct ggagctcctc ccaggcccggt gtgaggaaga
120
gcaaaggccg gcagggggctc gatggggacca gtcgtctcgt caggcccagg aaaaccacac
180
agctgggggc tgtcaggatt ggaccagggt caggccggcc aggcgatggc gggaaaagca
240
ggcccactct gcagacctca atgtctcagg tgcactgcag ggcaaccccg cctaccocgg
300
g
301

<210> 756

<211> 99

<212> PRT

<213> Homo sapiens

<400> 756

Met	Gln	Gly	Leu	Ser	Ser	Pro	Arg	Ile	Ser	Phe	Leu	Glu	Gly	Glu	Lys
1				5					10					15	
Gly	Pro	Ser	Cys	Leu	Pro	Ser	Asn	Arg	Val	Ala	Gly	Leu	Glu	Leu	Leu
		20					25					30			
Pro	Gly	Pro	Cys	Glu	Glu	Glu	Gln	Arg	Pro	Ala	Gly	Ala	Arg	Trp	Asp
		35				40					45				
Gln	Ser	Leu	Ala	Gln	Ala	Gln	Glu	Asn	His	Thr	Ala	Gly	Gly	Cys	Gln

```

      50              55              60
Asp Trp Thr Arg Val Arg Pro Ala Arg Arg Trp Arg Glu Lys Gln Ala
65              70              75              80
His Ser Ala Asp Leu Asn Val Ser Gly Ala Leu Gln Gly Asn Pro Ala
      85              90              95
Tyr Pro Gly

```

```

<210> 757
<211> 311
<212> DNA
<213> Homo sapiens

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```

<400> 757
actgaggcga tcgccagagg ggtgggcgtg cgagggctgc tcaacatcca gttcgccctg
60
gtctccgatg ttctctacgt catcgaggcc aaccccaggg catcgcgcac agtccccctc
120
gtctcaaagg catccggcgt gcagctcgcc aaagcggcgg ccctcatcat gacaggggag
180
acgatcgccct cgctcaggcg ctccggccac ctgcccgagg ccgacgcgcg cgtcaccgat
240
cccgatgacc cgatcgccgt caaggaggcg gtcctacctt tcaaacgatt ccgcaccacc
300
gaggggacgcg t
311

```

```

<210> 758
<211> 103
<212> PRT
<213> Homo sapiens

```

```

<400> 758
Thr Glu Ala Ile Ala Arg Gly Val Gly Val Arg Gly Leu Leu Asn Ile
1              5              10              15
Gln Phe Ala Leu Val Ser Asp Val Leu Tyr Val Ile Glu Ala Asn Pro
20              25              30
Arg Ala Ser Arg Thr Val Pro Phe Val Ser Lys Ala Ser Gly Val Gln
35              40              45
Leu Ala Lys Ala Ala Ala Leu Ile Met Thr Gly Glu Thr Ile Ala Ser
50              55              60
Leu Arg Arg Ser Gly His Leu Pro Glu Ala Asp Ala Val Thr Asp
65              70              75              80
Pro Asp Asp Pro Ile Ala Val Lys Glu Ala Val Leu Pro Phe Lys Arg
85              90              95
Phe Arg Thr Thr Glu Gly Arg
100

```

```

<210> 759
<211> 391
<212> DNA
<213> Homo sapiens

```

```

<400> 759

```

gtgcacacccg gcaagctggt gtggaactgg gacagcggca acccggaacga cactacgcgc
 60
 attgccgagg gcaagaccta caccgcgaac tcgcccgaaca tctgggtccat gtccgcgcgc
 120
 gacgaaaaaa tcggcatgct ctacctgcgc atggggcaacc agaccccgga ccagttcgccg
 180
 ggctaccgca cgcctgcgc ggaactgcac gctgccggcc tgacagcgct ggatatcgac
 240
 actggtaaag tgcctgggca ctaccagttc acccaccatg acctgtggga catggacgtg
 300
 ggccggccagc cgagcctgat cgacatcaag accgcccgcg gcgtgaaaca agccgtgatg
 360
 gcctcgacca agcaaggcag catctacgcg t
 391

<210> 760

<211> 130

<212> PRT

<213> Homo sapiens

<400> 760

Val	His	Thr	Gly	Lys	Leu	Val	Trp	Asn	Trp	Asp	Ser	Gly	Asn	Pro	Asp
1				5					10				15		
Asp	Thr	Thr	Pro	Ile	Ala	Glu	Gly	Lys	Thr	Tyr	Thr	Arg	Asn	Ser	Pro
			20					25				30			
Asn	Met	Trp	Ser	Met	Phe	Ala	Val	Asp	Glu	Lys	Leu	Gly	Met	Leu	Tyr
	35					40					45				
Leu	Pro	Met	Gly	Asn	Gln	Thr	Pro	Asp	Gln	Phe	Gly	Gly	Tyr	Arg	Thr
	50				55					60					
Pro	Ala	Ser	Glu	Leu	His	Ala	Ala	Gly	Leu	Thr	Ala	Leu	Asp	Ile	Asp
65				70					75					80	
Thr	Gly	Lys	Val	Arg	Trp	His	Tyr	Gln	Phe	Thr	His	His	Asp	Leu	Trp
			85					90					95		
Asp	Met	Asp	Val	Gly	Gly	Gln	Pro	Ser	Leu	Ile	Asp	Ile	Lys	Thr	Ala
		100					105						110		
Ala	Gly	Val	Lys	Gln	Ala	Val	Met	Ala	Ser	Thr	Lys	Gln	Gly	Ser	Ile
	115					120					125				
Tyr	Ala														
	130														

<210> 761

<211> 324

<212> DNA

<213> Homo sapiens

<400> 761

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 60
 ctaggagagg ccaatccttc cctgccccac agctccttct ctgcaaagct caggggggcaa
 120
 tcaggtaacct cctgcccacag aggcceccat ggttcctcgc ctaaggaagg cagggggggg
 180
 cattgggagc cggttgacagc tgggctcagc tggggggagg ggtcagtttg ggagcaggtg
 240

cagatttcag ggagggggg gcctaaaggg aagtagggat ctggtaggc tgcaaaattt
300

tcctcccat ccccatcca caga

324

<210> 762

<211> 105

<212> PRT

<213> Homo sapiens

<400> 762

Met	Gly	Asp	Gly	Glu	Glu	Asn	Phe	Ala	Ala	Tyr	Gln	Asp	Pro	Tyr	Phe
1				5					10					15	
Pro	Leu	Gly	Pro	Pro	Leu	Pro	Glu	Ile	Cys	Thr	Cys	Ser	Gln	Thr	Asp
			20				25					30			
Pro	Ser	Pro	Gln	Leu	Ser	Pro	Ala	Val	Asn	Gly	Ser	Gln	Cys	Pro	Ala
			35				40				45				
Leu	Pro	Ser	Leu	Gly	Glu	Glu	Pro	Trp	Gly	Pro	Leu	Gly	Gln	Glu	Val
			50			55				60					
Pro	Asp	Cys	Pro	Leu	Ser	Phe	Ala	Glu	Lys	Glu	Leu	Trp	Gly	Arg	Glu
65				70					75					80	
Gly	Leu	Ala	Ser	Pro	Arg	Arg	Tyr	Phe	Leu	Leu	His	Gln	Gly	Ser	Lys
				85					90					95	
Lys	Val	Arg	Pro	Leu	Trp	Ala	Tyr	Leu							
			100					105							

<210> 763

<211> 301

<212> DNA

<213> Homo sapiens

<400> 763

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tcctcggcgg tgtgctgaa gtggcgccca atatcgcat tactcgggc gcgaccgctg
120
ccgcggtggc gcgcaccggc ttaccgagg ccaccggcgg cctcggctgc ttctcgtg
180
gcgctgcctt gggcaccatt gccggcctgg ccgatgacaa cattggcgcg gacacagggc
240
tgaccaagat atgcaatgcc ttaacaacg ccttatttgc gccaccgtg catcgcaaca
300
t
301

<210> 764

<211> 100

<212> PRT

<213> Homo sapiens

<400> 764

Met	Phe	Ala	Cys	Thr	Val	Gly	Ala	Asn	Lys	Ala	Leu	Leu	Lys	Ala	Leu
1				5				10					15		
His	Ile	Leu	Val	Ser	Pro	Val	Ser	Ala	Pro	Met	Leu	Leu	Met	Ala	Arg

20				25				30							
Pro	Ala	Met	Val	Pro	Lys	Ala	Ala	Pro	Ser	Arg	Lys	Gln	Pro	Arg	Pro
35				40				45							
Pro	Val	Ala	Ser	Val	Lys	Pro	Val	Ala	Ala	Thr	Ala	Ala	Ala	Val	Ala
50				55				60							
Pro	Ala	Val	Ile	Ala	Ile	Leu	Ala	Ala	Thr	Ser	Ser	Thr	Pro	Pro	Arg
65				70				75				80			
Met	Ser	Ala	Ile	Ile	Glu	Val	Trp	Asp	Ser	Ala	Ser	Pro	Ile	Arg	Ala
85				90				95							
Ala	His	Asn	Ala												
100															

<210> 765

<211> 831

<212> DNA

<213> Homo sapiens

<400> 765

gcacactcc	agcctctgtt	ctttctcttc	tgtgtccctt	gcccttacca	cggttctcca
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120	agcctccaga	atcacaaatc	ccagctgaaa	ggggagggtc	tgagatataa
180	agagaagccc	agctctgacct	gaacaagaca	cgctgcgta	gtggtagtgc
240	tcccagtcta	gtactgagga	cccgaaggat	gagctgcggt	agctaaaaac
300	gacttatctc	cccagtcctc	agcttcaaa	gcattctcag	aggatgccaa
360	tctaaacggg	atgaagaaga	acgagaacga	gaaaggagggt	agaaggagag
420	agagaacggg	agaaggagaa	ggagagagaa	cgagagaagc	agaagctaaa
480	aaagagagag	attctgtcta	ggataaagag	aaaggcaaac	atgatgatgt
540	gaagcagaaa	ttaatacaaa	attgaagatt	gaactcaaga	aggcacagga
600	gagatgaaac	tattgctgga	tatgtacctg	tctgccccaa	aggaacagag
660	cagctgatgt	cagctgagaa	gaagtctaag	gcagagttgt	aagatctaag
720	aagtgattct	gagataaaga	gaagaaagag	aacaagaaaa	tggtcgatga
780	agaagaatcc	gggcagtgga	ggagcagata	gaatacctac	agaagaagct
831					a

<210> 766

<211> 243

<212> PRT

<213> Homo sapiens

<400> 766

Met Arg His Leu Ile Ser Ser Leu Gln Asn His Asn His Gln Leu Lys

```

      1           5           10           15
Gly Glu Val Leu Arg Tyr Lys Arg Lys Leu Arg Glu Ala Gln Ser Asp
      20           25           30
Leu Asn Lys Thr Arg Leu Arg Ser Gly Ser Ala Leu Leu Gln Ser Gln
      35           40           45
Ser Ser Thr Glu Asp Pro Lys Asp Glu Pro Ala Glu Leu Lys Pro Asp
      50           55           60
Ser Gly Asp Leu Ser Ser Gln Ser Ser Ala Ser Lys Ala Ser Gln Glu
      65           70           75           80
Asp Ala Asn Glu Ile Lys Ser Lys Arg Asp Glu Glu Glu Arg Glu Arg
      85           90           95
Glu Arg Arg Glu Lys Glu Arg Glu Arg Glu Arg Glu Arg Glu Lys Glu
      100          105          110
Lys Glu Arg Glu Arg Glu Lys Gln Lys Leu Lys Glu Ser Glu Lys Glu
      115          120          125
Arg Asp Ser Ala Lys Asp Lys Glu Lys Gly Lys His Asp Asp Gly Arg
      130          135          140
Lys Lys Glu Ala Glu Ile Ile Lys Gln Leu Lys Ile Glu Leu Lys Lys
      145          150          155          160
Ala Gln Glu Ser Gln Lys Glu Met Lys Leu Leu Leu Asp Met Tyr Arg
      165          170          175
Ser Ala Pro Lys Glu Gln Arg Asp Lys Val Gln Leu Met Ala Ala Glu
      180          185          190
Lys Lys Ser Lys Ala Glu Leu Glu Asp Leu Arg Gln Arg Leu Lys Asp
      195          200          205
Leu Glu Asp Lys Glu Lys Lys Glu Asn Lys Lys Met Ala Asp Glu Asp
      210          215          220
Ala Leu Arg Lys Ile Arg Ala Val Glu Glu Gln Ile Glu Tyr Leu Gln
      225          230          235          240
Lys Lys Leu

```

<210> 767

<211> 431

<212> DNA

<213> Homo sapiens

<400> 767

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gctagctcgc tcgcactcat tctcgggagg ctcccccgcg ccggcccggt cccgcccgct
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ccccggcacc agaagttcct ctgcgcgtcc gacggcgaca tgggcgtccc caccgccccg
120
gaggccggca gctggcgtcg gggatccctg ctcttcgctc tcttctctggc tgcgtcccta
180
ggtcggtggt cagccttcaa ggctcccaag ccgtattccc tgtatgtctg tcccaggagg
240
cagaacgtca cctcacctg caggctcttg ggcctgtgg acaaagggca cgatgtgacc
300
ttctacaaga cgtgggtacc gactcggagg ggcgaggtgc agacctgctc agagcgccgg
360
ccctcccgca acctcagctt ccaggacctt cacctgcacc atggagggcca ccaggtcgcc
420
aacaccagcc a
431

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<210> 768
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 768
 Met Gly Val Pro Thr Ala Pro Glu Ala Gly Ser Trp Arg Trp Gly Ser
 1 5 10 15
 Leu Leu Phe Ala Leu Phe Leu Ala Ala Ser Leu Gly Pro Val Ala Ala
 20 25 30
 Phe Lys Val Ala Thr Pro Tyr Ser Leu Tyr Val Cys Pro Glu Gly Gln
 35 40 45
 Asn Val Thr Leu Thr Cys Arg Leu Leu Gly Pro Val Asp Lys Gly His
 50 55 60
 Asp Val Thr Phe Tyr Lys Thr Trp Tyr Arg Ser Ser Arg Gly Glu Val
 65 70 75 80
 Gln Thr Cys Ser Glu Arg Arg Pro Ile Arg Asn Leu Thr Phe Gln Asp
 85 90 95
 Leu His Leu His His Gly Gly His Gln Ala Ala Asn Thr Ser
 100 105 110

<210> 769
 <211> 422
 <212> DNA
 <213> Homo sapiens

<400> 769
 tgtacacctc gtaatacatg atcgcgatac cgccccgcat gaccctaagc aactcattct
 60
 cgacttcgaa ctccatcaag tgatttttgc ggtcgacgaa tctggtttcc gatatgaaaga
 120
 acggtatggt ttgtatgtcg cggccctgcc actcaaacct caccgtgtca cccacctcaa
 180
 aaaaatcccg ggtcggccca caaataaatc aattgcgcgc ctcctcgag ttcttccatg
 240
 tcaacgatct cccctggctg ctcaagccaa ggcctctcgc gccgtgggac tccaaggttg
 300
 acgttgaccc gactgatttc ggaccagttg gcgtcggtat tgggggcagg gtagtaccg
 360
 cccatgtcga tgatctacat cgccaccggc agcgtgtctt cgtagtcgtc atgacctgatc
 420
 an
 422

<210> 770
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 770
 Met Phe Cys Met Ser Arg Pro Cys His Ser Asn Leu Thr Val Ser Pro
 1 5 10 15
 Thr Ser Lys Lys Ser Arg Val Gly Pro Gln Ile Asn Gln Leu Arg Arg

```

                20                25                30
Ser Ser Glu Phe Phe His Val Asn Asp Leu Pro Trp Leu Leu Lys Pro
   35                40                45
Arg Pro Ser Arg Pro Trp Asp Ser Lys Val Asp Val Asp Pro Thr Asp
   50                55                60
Phe Gly Pro Val Gly Val Gly Ile Gly Gly Arg Val Val Thr Ala His
65                70                75                80
Val Asp Asp Leu His Arg His Arg Gln Arg Val Phe Val Val Val Met
   85                90                95
Pro Asp Xaa

```

```

<210> 771
<211> 369
<212> DNA
<213> Homo sapiens

```

```

<400> 771
gcctacgcgc aattcctcgc gggatggcg tttacaatg cgtctctcgg gtagtgcgat
60
gcaatggcgc atcagctggg cggtttttac gatctgccgc acggcgtgtg caatgcgata
120
ctgttgccac acgtgcagac gtttaactgc aaagtggcgg cctcgcgcct gcgtgattgc
180
gcccaggcca tgggtgtcga tgtcagtc aaatgcagcag aacagggcgc acaggcgtgt
240
atgcagagaga ttcgtctctc ggcacgtcag gtgaatatcc cggtgaggatt gcgtgacctc
300
aacgtgaagg aagcggactt cccgattctg gcgaccaacg cgctaaaaga cccgtggggt
360
ttgattaat
369

```

```

<210> 772
<211> 123
<212> PRT
<213> Homo sapiens

```

```

<400> 772
Ala Tyr Ala Gln Phe Leu Ala Gly Met Ala Phe Asn Asn Ala Ser Leu
1                5                10                15
Gly Tyr Val His Ala Met Ala His Gln Leu Gly Gly Phe Tyr Asp Leu
20                25                30
Pro His Gly Val Cys Asn Ala Ile Leu Leu Pro His Val Gln Thr Phe
35                40                45
Asn Cys Lys Val Ala Ala Ser Arg Leu Arg Asp Cys Ala Gln Ala Met
50                55                60
Gly Val Asp Val Ser Gln Met Thr Ala Glu Gln Gly Ala Gln Ala Cys
65                70                75                80
Ile Ala Glu Ile Arg Ser Leu Ala Arg Gln Val Asn Ile Pro Val Gly
85                90                95
Leu Arg Asp Leu Asn Val Lys Glu Ala Asp Phe Pro Ile Leu Ala Thr
100                105                110
Asn Ala Leu Lys Asp Pro Val Gly Leu Ile Asn

```

115

120

<210> 773
 <211> 309
 <212> DNA
 <213> Homo sapiens

<400> 773
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 60
 ggttacttga tccgcgtgga gccggggcga caaactccgg aattcaccct ggaaaacgcc
 120
 tccggttctc gccgggattc ggcggtggtg ctggtgcaac tgctgcgcaa cctggggcctg
 180
 gcggcgcgat ttgtgtctgg ctatctgata caactgaccg ccgacgtcaa agccctcgac
 240
 ggcccggtccg gcaccgaggt ggatttcacc gacctgcatg cctggtgcga agtgattttg
 300
 cccggcgcc
 309

<210> 774
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 774
 Pro Pro Leu Pro Ala Val Asp Phe Leu Val Gly Leu Asn Gln Arg Leu
 1 5 10 15
 Ala Ala Asp Ile Gly Tyr Leu Ile Arg Val Glu Pro Gly Val Gln Thr
 20 25 30
 Pro Glu Phe Thr Leu Glu Asn Ala Ser Gly Ser Cys Arg Asp Ser Ala
 35 40 45
 Trp Leu Leu Val Gln Leu Leu Arg Asn Leu Gly Leu Ala Ala Arg Phe
 50 55 60
 Val Ser Gly Tyr Leu Ile Gln Leu Thr Ala Asp Val Lys Ala Leu Asp
 65 70 75 80
 Gly Pro Ser Gly Thr Glu Val Asp Phe Thr Asp Leu His Ala Trp Cys
 85 90 95
 Glu Val Tyr Leu Pro Gly Ala
 100

<210> 775
 <211> 4125
 <212> DNA
 <213> Homo sapiens

<400> 775
 nncaggatgg gcgcgaacaa tggcaaacag tacggcagtg agggcaaagg cagctcgagc
 60
 atctcatctg acgtgagttc aagtacagat cacacgccca ctaaagccca gaagaatgtg
 120
 gctaccagcg aagactccga cctgagcatg cgcacactga gcacgccag cccagccctg
 180

atatgtccac cgaatctccc aggtattcag aatggaagg gctcgtccac ctccctgctc
240
tccatcaccc gggagacggg ggccatgggt cactccccgc ccccgaccgc cctcacacac
300
ccgctcatcc ggctcgccct cagacccccg aaggatcagg ccagcataga ccggctcccc
360
gaccactcca tgggtgcagat cttctccttc ctgcccacca accagctgtg ccgctgctgc
420
cgagtgtgcc gccgctggta caacctgggc tgggaccgcg ggctctggag gactatccgc
480
ctgacgggcg agaccatcaa cgtggaccgc gccctcaagg tgctgaccgc cagactctgc
540
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600
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660
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720
aatctggagc acctggatgt gtcaggatgc tccaaagtga cctgcatcag cttgaccgcg
780
gaggcctcca ttaaactgtc acccttgcac ggcaaacaga ttccatccg ctacctggac
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1080
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1140
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1200
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1260
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1320
gagagcatca ccggccaggg cttgcagatc gtggcccgca actgctttga cctccagacg
1380
ctgaatgtcc aggactcgca ggtctccgtg gaggcctgc gctttgtcaa acgccaactg
1440
aagcgctgcg tcatcgagca caccaacccg gctttcttct gaaggacag agttcatccg
1500
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1560
ccgacaccca ctcaaaacag ctctttcttc cgggaagggt attaggaate tggcctttat
1620
ttttctcat ttctcatggg caacagagcg caaagaaagc aagcaagaca aacagcaaac
1680
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1740
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1800

gcccctttccc tcgcacacag gcccaccccc cacagtcca ccccccccc ccaaggccac
 1860
 accctccctc cctagagcag cagcgaggat ccatcatcag aatcacagt ctctccagac
 1920
 ctctctctta aactgcttca ttgacctaa tctctctt caatcccaca cccatggaca
 1980
 ttcttgtcaa ctcaatacca tagcactttg cataggcaaa atacttttca ggccttttta
 2040
 aaaaattcat tacagcaaac agctggggaa ggacatgcag tctccccca gctctgtcaa
 2100
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 2160
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 2220
 acccatacac agaagcacct tggcatagag caccaggcca tcgacctctt ccaggagaac
 2280
 tgattctgtg gatggatgtg atttcaggag attgtgcagt gccagcatca gtgcataaag
 2340
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 2400
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 2460
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 2520
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 2580
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 2640
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 2700
 gacagatgcc tcggttcttt gtcattcaga ttgcatttga cctcttctca tctatttatt
 2760
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 2820
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 2880
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 2940
 gaagagggaa cacactgaga tgacttagac tctgggccac caaccagacc cttggaaagg
 3000
 aataactaaa tcattacaag gtatggattt taaatggatg aaacttcaaa ttactttatt
 3060
 tggatagaag tctatattct agcctcattt gcatagaatc agatagccag aagaaattcc
 3120
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 3180
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 3240
 aaaaagccca ttatccaat gcagaacctc tgcacttcca agcagttat gctgaatttg
 3300
 tcaaaacttag acacccttga caactgcact cctactgtag gctcctgtgc atactgtctg
 3360
 ctctgtggg ggatggagag gttagtgtga tgagtggtg tctgccagg aggtttcttt
 3420

caaacatcat ggcctcccat ccaatcaaca tcataaaaatt acatgtgttaa tcaaggctct
 3480
 gtgccatggg ggaatgaat catttagcta ggccaggatc tagtgaaagc cacagagttt
 3540
 aaaacatga aagaagtga aggagcatt cctcagctct gtgactgtgt accctatttg
 3600
 aagtttcagg atttgggtgt cacaaggat tgccctaatt ccttggccct ggggtcttcc
 3660
 gagtgagctg gttaataact ctgagaatga gcaggagat ccagagaatg aatccctgac
 3720
 cgcatcacct aaactgtctt ccaaacatga gacaaagctg actgttcaca ctgattgccc
 3780
 agcacatacc gtcttgccag tttcttcttt tctccagtc tctgttcat ccattctgtt
 3840
 ctcccttggg gtgggaatct atgatggagg ttaactggga aacagctcag cagatttttg
 3900
 gagaccaaac caaaggtctc actaggaat ttatctgttt taaaacattg ctctctctct
 3960
 ggctctgcta aattgaatgc tcattgtttg ttgttgtttg ttttaattc taatgttcaa
 4020
 atcactgcgt gctgtatgaa tctagaaagc cttaatttac taccaagaaa taaagcaata
 4080
 tgttcgtaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaa
 4125

<210> 776

<211> 483

<212> PRT

<213> Homo sapiens

<400> 776

Tyr Gly Ser Glu Gly Lys Gly Ser Ser Ser Ile Ser Ser Asp Val Ser
 1 5 10 15
 Ser Ser Thr Asp His Thr Pro Thr Lys Ala Gln Lys Asn Val Ala Thr
 20 25 30
 Ser Glu Asp Ser Asp Leu Ser Met Arg Thr Leu Ser Thr Pro Ser Pro
 35 40 45
 Ala Leu Ile Cys Pro Pro Asn Leu Pro Gly Phe Gln Asn Gly Arg Gly
 50 55 60
 Ser Ser Thr Ser Ser Ser Ser Ile Thr Gly Glu Thr Val Ala Met Val
 65 70 75 80
 His Ser Pro Pro Thr Arg Leu Thr His Pro Leu Ile Arg Leu Ala
 85 90 95
 Ser Arg Pro Gln Lys Asp Gln Ala Ser Ile Asp Arg Leu Pro Asp His
 100 105 110
 Ser Met Val Gln Ile Phe Ser Phe Leu Pro Thr Asn Gln Leu Cys Arg
 115 120 125
 Cys Ala Arg Val Cys Arg Arg Trp Tyr Asn Leu Ala Trp Asp Pro Arg
 130 135 140
 Leu Trp Arg Thr Ile Arg Leu Thr Gly Glu Thr Ile Asn Val Asp Arg
 145 150 155 160
 Ala Leu Lys Val Leu Thr Arg Arg Leu Cys Gln Asp Thr Pro Asn Val
 165 170 175
 Cys Leu Met Leu Glu Thr Val Thr Val Ser Gly Cys Arg Arg Leu Thr

```

      180              185              190
Asp Arg Gly Leu Tyr Thr Ile Ala Gln Cys Cys Pro Glu Leu Arg Arg
      195              200              205
Leu Glu Val Ser Gly Cys Tyr Asn Ile Ser Asn Glu Ala Val Phe Asp
      210              215              220
Val Val Ser Leu Cys Pro Asn Leu Glu His Leu Asp Val Ser Gly Cys
      225              230              235              240
Ser Lys Val Thr Cys Ile Ser Leu Thr Arg Glu Ala Ser Ile Lys Leu
      245              250              255
Ser Pro Leu His Gly Lys Gln Ile Ser Ile Arg Tyr Leu Asp Met Thr
      260              265              270
Asp Cys Phe Val Leu Glu Asp Glu Gly Leu His Thr Ile Ala Ala His
      275              280              285
Cys Thr Gln Leu Thr His Leu Tyr Leu Arg Arg Cys Val Arg Leu Thr
      290              295              300
Asp Glu Gly Leu Arg Tyr Leu Val Ile Tyr Cys Ala Ser Ile Lys Glu
      305              310              315              320
Leu Ser Val Ser Asp Cys Arg Phe Val Ser Asp Phe Gly Leu Arg Glu
      325              330              335
Ile Ala Lys Leu Glu Ser Arg Leu Arg Tyr Leu Ser Ile Ala His Cys
      340              345              350
Gly Arg Val Thr Asp Val Gly Ile Arg Tyr Val Ala Lys Tyr Cys Ser
      355              360              365
Lys Leu Arg Tyr Leu Asn Ala Arg Gly Cys Glu Gly Ile Thr Asp His
      370              375              380
Gly Val Glu Tyr Leu Ala Lys Asn Cys Thr Lys Leu Lys Ser Leu Asp
      385              390              395              400
Ile Gly Lys Cys Pro Leu Val Ser Asp Thr Gly Leu Glu Cys Leu Ala
      405              410              415
Leu Asn Cys Phe Asn Leu Lys Arg Leu Ser Leu Lys Ser Cys Glu Ser
      420              425              430
Ile Thr Gly Gln Gly Leu Gln Ile Val Ala Ala Asn Cys Phe Asp Leu
      435              440              445
Gln Thr Leu Asn Val Gln Asp Cys Glu Val Ser Val Glu Ala Leu Arg
      450              455              460
Phe Val Lys Arg His Cys Lys Arg Cys Val Ile Glu His Thr Asn Pro
      465              470              475              480
Ala Phe Phe

```

<210> 777

<211> 705

<212> DNA

<213> Homo sapiens

<400> 777

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ggtaccatcg tttttaaac taattaagat attactcatt ctgttggtg cccaattcca
60
caccaatctg ctctttaatg ccagactgat ggctctaaca atccttatta actcctttt
120
gtggcttcaa ggaataacaa aaacctcttc tctcattcac cacctctagg ccaggagaaa
180
ttatttttgg ttcaggcttt cacagtgggg gtctgaaagt gaccagtcta gaaaaggatg
240

```

actcagcaaa aggagagctc tgaagggtccc tgaggcggca cgggtccagca ttattaggctc
 300
 acatgggtatg acctgaaaca aatacgttct tcccaaatgt ggcaggaccg ggagagcttc
 360
 tcaccaggag ggaaccgccc caatgaccgc cggacgtcca gcaacacttg ttggtagtcc
 420
 ttgtcatct gccgtagggt cttccctgat ataggagggt ggtcattggc attgacattg
 480
 aggagcttgg gccacacttt tcgtctgac tcacatcagta ggagccctcc ttcactgata
 540
 gccatgcgtc taagggcagc cacatcagt ggatcactgt tcagagcctg gtgtatctct
 600
 aacactttct ttttcccttt ggcgttaaag tctgccttct ccgcgccgcc gtcccagttg
 660
 ccggaggtgg gccgtccct gcgcactccg gaggccatcc ccggg
 705

<210> 778

<211> 134

<212> PRT

<213> Homo sapiens

<400> 778

Met	Ala	Ser	Gly	Val	Arg	Arg	Gly	Arg	Pro	Thr	Ser	Gly	His	Trp	Asp
1				5					10				15		
Gly	Gly	Ala	Glu	Lys	Ala	Asp	Phe	Asn	Ala	Lys	Arg	Lys	Lys	Lys	Val
		20						25				30			
Leu	Glu	Ile	His	Gln	Ala	Leu	Asn	Ser	Asp	Pro	Thr	Asp	Val	Ala	Ala
	35					40						45			
Leu	Arg	Arg	Met	Ala	Ile	Ser	Glu	Gly	Gly	Leu	Leu	Thr	Asp	Glu	Ile
	50					55				60					
Arg	Arg	Lys	Val	Trp	Pro	Lys	Leu	Leu	Asn	Val	Asn	Ala	Asn	Asp	Pro
65					70				75					80	
Pro	Pro	Ile	Ser	Gly	Lys	Asn	Leu	Arg	Gln	Met	Ser	Lys	Asp	Tyr	Gln
			85					90						95	
Gln	Val	Leu	Leu	Asp	Val	Arg	Arg	Ser	Leu	Arg	Arg	Phe	Pro	Pro	Gly
			100					105				110			
Glu	Lys	Leu	Ser	Arg	Ser	Cys	His	Ile	Trp	Glu	Glu	Arg	Ile	Cys	Phe
		115				120						125			
Arg	Ser	Tyr	His	Val	Thr										
		130													

<210> 779

<211> 322

<212> DNA

<213> Homo sapiens

<400> 779

tccggacatg tgcaaaacaat tcaatgatgt ggtgcgtcga catggtgtgc atcactctgt
 60
 gactgtgagt gattctgagg ataccgttgc gccgtcccg ctggttcgat cccctcgtaa
 120
 cgccttgccct ttgaagggaac ccagtgggaa ggctagacca agtaaatatg aatcaccaaa
 180

cgccagcaac ttcacgtca ggcacgtggc aactggcaaa gagggcactg atgatgagta
 240
 tgctaactca aactactact actcagatgtc tgccaatcga ctaggagacg aggaaacgga
 300
 ggaaatgata ggtttggtca cc
 322

<210> 780
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 780
 Met Cys Lys Gln Phe Asn Asp Val Val Arg Arg His Gly Val His His
 1 5 10 15
 Ser Val Thr Val Ser Asp Ser Glu Asp Thr Val Ala Pro Ser Gln Leu
 20 25 30
 Val Arg Ser Pro Arg Asn Ala Leu Pro Leu Lys Glu Pro Ser Gly Lys
 35 40 45
 Ala Arg Pro Ser Lys Tyr Glu Ser Pro Asn Ala Ser Asn Phe Ile Val
 50 55 60
 Arg His Val Ala Thr Gly Lys Glu Gly Thr Asp Asp Glu Tyr Ala Asn
 65 70 75 80
 Ser Asn Tyr Tyr Tyr Ser Met Ser Ala Asn Arg Leu Gly Asp Glu Glu
 85 90 95
 Thr Glu Glu Met Ile Gly Leu Ala Thr
 100 105

<210> 781
 <211> 297
 <212> DNA
 <213> Homo sapiens

<400> 781
 nntcgcgtgc ctggaatgtg tgtctgtgta tgtgtgtgta tgtatgtgtg tatggaatgt
 60
 gtgtgtatgn gaatatgtgt gtgtatgnga atgtgtgtgt gtgtttggaa tgtgtgtatg
 120
 gaatgtgtgt ctgtgtatgg aatatgtgtg agtatngaa tgtgtgtgtg tgtttggaat
 180
 gtatcgaatg tgtgtctgtg tgtaaggaat gtgtgtgtat ggaatgtgtt tacgtgcagt
 240
 tgtctggaat gtgtgtgtat ggaatgtgtg tgtatgtgta tgngaattgt gtgtgtgt
 297

<210> 782
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 782
 Xaa Arg Val Pro Gly Met Cys Val Cys Val Cys Met Tyr Val
 1 5 10 15
 Cys Met Glu Cys Val Cys Met Xaa Ile Cys Val Cys Met Xaa Met Cys

```

                20                25                30
Val Cys Val Trp Asn Val Cys Met Glu Cys Val Ser Val Tyr Gly Ile
    35                40                45
Cys Val Ser Met Xaa Met Cys Val Cys Val Trp Asn Val Ser Asn Val
    50                55                60
Cys Leu Cys Val Arg Asn Val Cys Val Trp Asn Val Phe Thr Cys Met
    65                70                75                80
Cys Leu Glu Cys Val Cys Met Glu Cys Val Cys Met Cys Met Xaa Met
    85                90                95
Cys Val Cys

```

<210> 783

<211> 612

<212> DNA

<213> Homo sapiens

<400> 783

```

accggtgacg taactgctcc cgctggcagc ttcgagggcg atgtcgattt gcgtgcccg
60
caccgggtcg agtgagctgc ccagcagcaa gccaccaca tcggtgacca gaccgatcac
120
ttgtttgagc acgtcgatga cgggcaactt caaggaaatc caggtgcgga cttgcgggt
180
cgcacaaaa atcggctggg tgtcgatcaa ctgcgggttg ccaatcgagc aatttgcgcg
240
gttcgatgac acgtgtcttc accgtgatat tcagcagccc cagtacgtcc accggcaact
300
cgacggccac cgcgctggct ttgttgaca gctgcacaaa gccctgaate aggttgaaca
360
gttgccagggt gacgtccagg gcgctcttgt ccgtgccgtt ttgtatattg atcaggtcgc
420
ccaggtgcag gatctgcgtg cctggggcaa tcagcttgat tgcttcgagg ttattgatca
480
ccacctggac cgcattaccg cccagcttga gcacatcgat ggcggcctgg atcaactggc
540
cgacggtcgc gtcggtcttg agcaactggg cgtagtgtcc ggcgctgagc ttgaggcgga
600
tggtcgacgc gt
612

```

<210> 784

<211> 190

<212> PRT

<213> Homo sapiens

<400> 784

```

Met Ser Ile Cys Val Pro Gly Thr Gly Ser Ser Glu Leu Pro Ser Ser
  1                5                10                15
Lys Pro Thr Thr Ser Val Thr Arg Pro Ile Thr Leu Leu Ser Thr Ser
    20                25                30
Met Thr Gly Asn Phe Lys Glu Ile Gln Val Arg Thr Cys Ala Val Arg
    35                40                45
Thr Lys Ile Gly Trp Val Ser Ile Asn Cys Gly Leu Pro Ile Ala Glu

```

```

      50              55              60
Phe Ala Arg Phe Asp Asp Thr Cys Leu His Arg Asp Ile Gln Gln Pro
65              70              75              80
Gln Tyr Val His Arg Gln Leu Asp Gly His Arg Ala Gly Phe Val Gly
      85              90              95
Gln Leu His Lys Ala Leu Asn Gln Val Glu Gln Leu Gln Val Asp Val
      100              105              110
Gln Gly Ala Leu Val Arg Ala Val Leu Tyr Ile Asp Gln Val Ala Gln
      115              120              125
Val Gln Asp Leu Arg Ala Trp Gly Asn Gln Leu Asp Cys Phe Glu Val
      130              135              140
Ile Asp His His Leu Asp Arg Ile Thr Ala Gln Leu Glu His Ile Asp
145              150              155              160
Gly Gly Leu Asp Gln Leu Ala Asp Gly Arg Val Gly Leu Glu Gln Leu
      165              170              175
Val Val Val Ala Gly Ala Asp Val Glu Ala Asp Gly Arg Arg
      180              185              190

```

<210> 785

<211> 408

<212> DNA

<213> Homo sapiens

<400> 785

```

accctggact acttcactat cgaccctcgg ctaggcgacg acgatgactt cgaacacctg
60
cttcaggccg cccacgcctcg tggctctgtca gtactgtctg acgggggtggt caaacacgctc
120
tcgcgtcgca accgcacgtg gcaggatgcg cagagtgtcg gccagattc agacgccggc
180
cgtatggttc gctggtgtga ggggcgcctc gacgttttc aggytcatag tgacctggtc
240
gcaactcaacc acgacaaccc cgagtgccgg gaacatgtca ccggatcat gaactattgg
300
tgcggtcgcg gtgttgacgg ctggcggctg gacgccgcta ttccgtcaat cctgagtctt
360
gggctgcggg gctgcctccg gtgcgagaga agcgccttga cgtgagga
408

```

<210> 786

<211> 134

<212> PRT

<213> Homo sapiens

<400> 786

```

Thr Leu Asp Tyr Phe Thr Ile Asp Pro Arg Leu Gly Asp Asp Asp Asp
1      5      10      15
Phe Asp His Leu Leu Gln Ala Ala His Ala Arg Gly Leu Ser Val Leu
20      25      30
Leu Asp Gly Val Val Asn His Val Ser Arg Arg Asn Arg Ile Val Gln
35      40      45
Asp Ala Gln Ser Ala Gly Pro Asp Ser Asp Ala Gly Arg Met Val Arg
50      55      60
Trp Cys Glu Gly Arg Leu Asp Val Phe Glu Gly His Ser Asp Leu Val

```

```

65              70              75              80
Ala Leu Asn His Asp Asn Pro Ala Val Arg Glu His Val Thr Arg Ile
      85              90              95
Met Asn Tyr Trp Cys Gly Arg Gly Val Asp Gly Trp Arg Leu Asp Ala
      100              105              110
Ala Ile Pro Ser Ile Leu Ser Ser Gly Leu Arg Cys Cys Leu Arg Cys
      115              120              125
Glu Arg Ser Ala Leu Thr
      130

```

<210> 787

<211> 310

<212> DNA

<213> Homo sapiens

<400> 787

```

acgcgtgaag gggaatgaaa ggggtttttcc tggatcaaaa tgatgcttgt ggcagacaca
60
gttggaaacca cagacgatgc cacgcttgtg tcagcagtgac gacactggcc cactggcgct
120
ccttggtctc tcctcattgc tgccgtcact gtgtgctggg catgccctgc agttacccca
180
aagctttatg tcacaacatt gaggctggcg gagaaagacc ggccccttca cccacacctta
240
gacttcctgg aagggccgcc cggtgccaca acctggcccg ttaactccct gggcagctgc
300
tgggggagaa
310

```

<210> 788

<211> 90

<212> PRT

<213> Homo sapiens

<400> 788

```

Met Met Leu Val Ala Asp Thr Val Gly Thr Thr Asp Asp Ala Thr Leu
1              5              10              15
Val Ser Ala Val Arg His Trp Pro Thr Trp Arg Pro Trp Ser Leu Leu
      20              25              30
Ile Ala Ala Val Thr Val Cys Trp Ala Cys Pro Ala Val Thr Pro Lys
      35              40              45
Leu Tyr Val Thr Thr Leu Arg Leu Ala Glu Lys Asp Arg Pro Leu His
      50              55              60
Pro Thr Leu Asp Phe Leu Glu Gly Pro Pro Gly Ser Thr Thr Trp Pro
65              70              75              80
Val Asn Ser Leu Gly Ser Cys Trp Gly Arg
      85              90

```

<210> 789

<211> 369

<212> DNA

<213> Homo sapiens

<400> 789

acgcgtgaag ttgcagcagc aagcaatctg cctcgcttct ggtgccacc gaaaccaagg
 60
 tctgccagac agcagcgctg ggacctctcc cctccccagc aggatgggcc ggctctggaa
 120
 gcacgaggtg ttccaaagt caaacaagct gctgttaaat aattattccc aaacgccaaa
 180
 gcccttgcgt gtttgcttgc ttgctttttt ctttttttgc ctgcacaga tategctagg
 240
 gcagagtatt gacatttcgt tttctttttg ttatgggtga taaagcacgg tgtttcttgt
 300
 gagtgtatgc ctgtatttcc ctgcagagct gattgccagt ccattttctt ctatcccatc
 360
 cccattttc
 369

<210> 790

<211> 114

<212> PRT

<213> Homo sapiens

<400> 790

Met	Asp	Trp	Gln	Ser	Ala	Leu	Gln	Gly	Asn	Thr	Gly	Ile	His	Ser	Gln
1			5					10					15		
Glu	Thr	Pro	Cys	Phe	Ile	Thr	His	Asn	Lys	Lys	Thr	Lys	Cys	Gln	
		20						25				30			
Tyr	Ser	Ala	Leu	Ala	Ile	Ser	Val	Arg	Gly	Lys	Lys	Arg	Lys	Lys	Gln
		35					40					45			
Ala	Ser	Lys	Pro	Ala	Arg	Ala	Leu	Ala	Phe	Gly	Asn	Asn	Tyr	Leu	Thr
		50				55				60					
Ala	Ala	Cys	Leu	His	Phe	Gly	Thr	Pro	Arg	Ala	Ser	Arg	Ala	Gly	Pro
65				70					75					80	
Ser	Cys	Trp	Gly	Gly	Glu	Arg	Ser	Gln	Arg	Cys	Cys	Leu	Ala	Asp	Leu
			85						90				95		
Gly	Phe	Gly	Gly	His	Gln	Lys	Arg	Gly	Arg	Leu	Leu	Ala	Ala	Ala	Thr
			100					105					110		
Ser	Arg														

<210> 791

<211> 420

<212> DNA

<213> Homo sapiens

<400> 791

nctctgacca aaaggaaggt atatgaaaac acaacactag gcttcattgt tgaagttgaa
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 ggtcttccag ttcttggtgt gaaatggtat cgaaataaat ctttactaga gccagatgaa
 120
 agaattcaaaa tgggaagagt gggtaatgtg tgttcactgg aaatttctaa cattcaaaaa
 180
 ggagaagggg gagagtacat gtgtcatgct gtaaacatca taggggaagc aaagagcttt
 240
 gcaaattgtag acataatgcc ccaggaagaa agagtgggtgg cactaccacc tccagtaaca
 300

catcagcatg tcattggagtt tgatttggaa cacaccacat catcaagaac accttctcct
 360
 caagaaattg tcttggaagt tgaattaagt gaaaaagacg ttaaagaatt tgagaagcag
 420

<210> 792

<211> 138

<212> PRT

<213> Homo sapiens

<400> 792

Thr	Lys	Arg	Lys	Val	Tyr	Glu	Asn	Thr	Thr	Leu	Gly	Phe	Ile	Val	Glu
1				5					10					15	
Val	Glu	Gly	Leu	Pro	Val	Pro	Gly	Val	Lys	Trp	Tyr	Arg	Asn	Lys	Ser
			20					25					30		
Leu	Leu	Glu	Pro	Asp	Glu	Arg	Ile	Lys	Met	Glu	Arg	Val	Gly	Asn	Val
			35				40					45			
Cys	Ser	Leu	Glu	Ile	Ser	Asn	Ile	Gln	Lys	Gly	Glu	Gly	Gly	Glu	Tyr
			50			55					60				
Met	Cys	His	Ala	Val	Asn	Ile	Ile	Gly	Glu	Ala	Lys	Ser	Phe	Ala	Asn
					70					75				80	
Val	Asp	Ile	Met	Pro	Gln	Glu	Glu	Arg	Val	Val	Ala	Leu	Pro	Pro	Pro
				85				90						95	
Val	Thr	His	Gln	His	Val	Met	Glu	Phe	Asp	Leu	Glu	His	Thr	Thr	Ser
				100				105					110		
Ser	Arg	Thr	Pro	Ser	Pro	Gln	Glu	Ile	Val	Leu	Glu	Val	Glu	Leu	Ser
			115			120						125			
Glu	Lys	Asp	Val	Lys	Glu	Phe	Glu	Lys	Gln						
			130			135									

<210> 793

<211> 479

<212> DNA

<213> Homo sapiens

<400> 793

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 ccgcgaacag tactgcggga acccaaacga tcatttttaa cccagacgt ccttgaacca
 120
 aagccaaagt ctacaggtca ctggggcaga ggccgcccga aaccagcttc cctcccgccg
 180
 ctaggcgcgc caggtccccc cccagccggg gcgatccttt ggtcggacag tgaggttggtg
 240
 agccaccgc acccaagtc gccgcattca ccgcgcgcag gcgacccccg acggggcagcc
 300
 gctcaccttc tcttgcccc ggcttcaggaa aaactgcctg gaggtggccg ggggtcccta
 360
 gcggaggctg ggccggcggc ttgcgcctg cctcagcttc cccatccgtg gccccggggga
 420
 tggagccccg tgccgcgcaga ggctgcggca ggtccagcc aggtgccctg gaacgtgga
 479

<210> 794

<211> 159

<212> PRT

<213> Homo sapiens

<400> 794

Xaa Ala Cys Arg Phe Ser Glu Ile His Tyr Gly Asn Val Arg Val Val
 1 5 10 15
 Glu Met Leu Arg Pro Arg Thr Val Leu Arg Glu Pro Lys Arg Ser Phe
 20 25 30
 Leu Thr Pro Asp Val Pro Glu Pro Lys Pro Lys Ser Thr Gly His Trp
 35 40 45
 Gly Arg Gly Arg Pro Lys Pro Ala Ser Pro Pro Gly Leu Gly Ala Pro
 50 55 60
 Gly Pro Arg Pro Ala Gly Ala Ile Leu Trp Ser Asp Ser Glu Val Gly
 65 70 75 80
 Ser Pro Pro His Pro Ser Pro Pro His Pro Pro Gly Ala Gly Asp Pro
 85 90 95
 Arg Arg Ala Ala His Leu Leu Leu Ala Pro Ala Ser Gly Lys Leu
 100 105 110
 Pro Gly Gly Gly Arg Gly Ser Leu Ala Glu Ala Gly Arg Arg Ala Ser
 115 120 125
 Arg Leu Pro Gln Ser Pro His Pro Trp Pro Gly Gly Trp Ser Pro Leu
 130 135 140
 Arg Ala Glu Ala Ala Ala Gly Pro Ser Gln Val Pro Trp Asn Val
 145 150 155

<210> 795

<211> 1418

<212> DNA

<213> Homo sapiens

<400> 795

gccggcggcg gggaggccgg ggctgcagg ccccggtac gacaagatcc ggactccggc
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 ccggactacg aggcgctgcc ggctggagcc actgtcacca cgcacatggt ggcaggcgcc
 120
 gtggcaggga tcttgagca ctgcgtgatg taccccatcg actgcgtcaa gaccgggatg
 180
 cagagtctac agcctgaccc agctgcccgc tatcgcaatg tgttgagggc cctctggagg
 240
 attataagaa cggaggccct atggaggccc atgagggggc tgaacgtcac agcaacaggc
 300
 gcaggggcctg cccacgcctt ttattttgcc tgctacgaaa agttaaaaaa gacattgagt
 360
 gatgtaatcc accctggggg caatagccat attgccaatg gtgcggccgg gtgtgtggca
 420
 acattacttc atgatgcagc catgaaccct gcggaaggct gatctgtgta cttggggctc
 480
 tgaatctgga tactctccat caccgggttg ctgctgtcac catttccctc ctggttgatg
 540
 gcactactag tgggtcaagca gaggatgcag atgtacaact caccatacca cgggtgaca
 600
 gactgtgtac gggcagtggt gcaaaatgaa ggggcccggg ccttttaccg cagctacacc
 660

acccagctga ccatgaacgt tcctttccaa gccattcact tcatgaccta tgaattcctg
 720
 caggagcact ttaaccccca gagacggtac aacccaagct cccacgtcct ctctggagct
 780
 tgcgcaggag ctgtagctgc cgcagccaca accccactgg acgtttgcaa aacactgctc
 840
 aacacccagg agtccttggc ttgaactca cacattacag gacatatcac aggcattggc
 900
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 960
 gccagagtaa ttaccagat cccctccaca gccatcgcat ggtctgtgta tgagttcttc
 1020
 aaatacctaa tcactaaaag gcaagaagag tggagggtcg gcaagtgaag tagcactgaa
 1080
 cgaagccagg ggttcagatg acactgctgc atcctgggtca cattctctgt ctccctggaat
 1140
 gctcccacct caagtggagt tagaaggaag gtagaggggc tctccccag gattttgggt
 1200
 ttttgactaa caccagttcc tgccaacctc tgttgccacc acctttcctt ccaggcccta
 1260
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		20				25						30			
Lys	Pro	Pro	Val	Cys	Ala	Val	Cys	Lys	Val	Thr	Ile	Asp	Gly	Thr	Gly
		35				40						45			
Val	Ser	Cys	Arg	Val	Cys	Lys	Val	Ala	Thr	His	Arg	Lys	Cys	Glu	Ala
	50				55					60					
Lys	Val	Thr	Ser	Ala	Cys	Gln	Ala	Leu	Pro	Pro	Val	Glu	Leu	Arg	Arg
	65				70					75				80	
Asn	Thr	Ala	Pro	Val	Arg	Arg	Ile	Glu	His	Leu	Gly	Ser	Thr	Lys	Ser
		85						90						95	
Leu	Asn	His	Ser	Lys	Gln	Arg	Ser	Thr	Leu	Pro	Arg	Ser	Phe	Ser	Leu
		100					105						110		
Asp	Pro	Leu	Met	Glu	Arg	Arg	Trp	Asp	Leu	Asp	Leu	Thr	Tyr	Val	Thr
		115					120					125			
Glu	Arg	Ile	Leu	Ala	Ala	Ala	Phe	Pro	Ala	Arg	Pro	Asp	Glu	Gln	Arg
	130				135							140			
His	Arg	Gly	His	Leu	Arg	Glu	Leu	Ala	His	Val	Leu	Gln	Ser	Lys	His
	145				150					155				160	
Arg	Asp	Lys	Tyr	Leu	Leu	Phe	Asn	Leu	Ser	Glu	Lys	Arg	His	Asp	Leu
		165						170						175	
Thr	Arg	Leu	Asn	Pro	Lys	Val	Gln	Asp	Phe	Gly	Trp	Pro	Glu	Leu	His
		180						185					190		
Ala	Pro	Pro	Leu	Asp	Lys	Leu	Cys	Ser	Ile	Cys	Lys	Ala	Met	Glu	Thr
		195					200					205			
Trp	Leu	Ser	Ala	Asp	Pro	Gln	His	Val	Val	Val	Leu	Tyr	Cys	Lys	Gly
	210					215					220				
Asn	Lys	Gly	Lys	Leu	Gly	Val	Ile	Val	Ser	Ala	Tyr	Met	His	Tyr	Ser
	225				230					235				240	
Lys	Ile	Ser	Ala	Gly	Ala	Asp	Gln	Ala	Leu	Ala	Thr	Leu	Thr	Met	Arg
		245							250					255	
Lys	Phe	Cys	Glu	Asp	Lys	Val	Ala	Thr	Glu	Leu	Gln	Pro	Ser	Gln	Arg
		260						265					270		
Arg	Tyr	Ile	Ser	Tyr	Phe	Ser	Gly	Leu	Leu	Ser	Gly	Ser	Ile	Arg	Met
	275					280						285			
Asn	Ser	Ser	Pro	Leu	Phe	Leu	His	Tyr	Val	Leu	Ile	Pro	Met	Leu	Pro

290 295 300
 Ala Phe Glu Pro Gly Thr Gly Phe Gln Pro Phe Leu Lys Ile Tyr Gln
 305 310 315 320
 Ser Met Gln Leu Val Tyr Thr Ser Gly Val Tyr His Ile Ala Gly Pro
 325 330 335
 Gly Pro Gln Gln Leu Cys Ile Ser Leu Glu Pro Ala Leu Leu Leu Lys
 340 345 350
 Gly Asp Val Met Val Thr Cys Tyr His Lys Gly Gly Arg Gly Thr Asp
 355 360 365
 Arg Thr Leu Val Phe Arg Val Gln Phe His Thr Cys Thr Ile His Gly
 370 375 380
 Pro Gln Leu Thr Phe Pro Lys Asp Gln Leu Asp Glu Ala Trp Thr Asp
 385 390 395 400
 Glu Arg Phe Pro Phe Gln Ala Ser Val Glu Phe Val Phe Ser Ser Ser
 405 410 415
 Pro Glu Lys Ile Lys Gly Ser Thr Pro Arg Asn Asp Pro Ser Val Ser
 420 425 430
 Val Asp Tyr Asn Thr Thr Glu Pro Ala Val Arg Trp Asp Ser Tyr Glu
 435 440 445
 Asn Phe Asn Gln His His Glu Asp Ser Val Asp Gly Ser Leu Thr His
 450 455 460
 Thr Arg Gly Pro Leu Asp Gly Ser Pro Tyr Ala Gln Val Gln Arg Pro
 465 470 475 480
 Pro Arg Gln Thr Pro Pro Ala Pro Ser Pro Glu Pro Pro Pro Pro Pro
 485 490 495
 Met Leu Ser Val Ser Ser Asp Ser Gly His Ser Ser Thr Leu Thr Thr
 500 505 510
 Glu Pro Ala Ala Glu Ser Pro Gly Arg Pro Pro Pro Thr Ala Ala Glu
 515 520 525
 Arg Gln Glu Leu Asp Arg Leu Leu Gly Gly Cys Gly Val Ala Ser Gly
 530 535 540
 Gly Arg Gly Ala Gly Arg Glu Thr Ala Ile Leu Asp Asp Glu Glu Gln
 545 550 555 560
 Pro Thr Val Gly Gly Gly Pro His Leu Gly Val Tyr Pro Gly His Arg
 565 570 575
 Pro Gly Leu Ser Arg His Cys Ser Cys Arg Gln Gly Tyr Arg Glu Pro
 580 585 590
 Cys Gly Val Pro Asn Gly Gly Tyr Tyr Arg Pro Glu Gly Thr Leu Glu
 595 600 605
 Arg Arg Arg Leu Ala Tyr Gly Gly Tyr Glu Gly Ser Pro Gln Gly Tyr
 610 615 620
 Ala Glu Ala Ser Met Glu Lys Arg Arg Leu Cys Arg Ser Leu Ser Glu
 625 630 635 640
 Gly Leu Tyr Pro Tyr Pro Pro Glu Met Gly Lys Pro Ala Thr Gly Asp
 645 650 655
 Phe Gly Tyr Arg Ala Pro Gly Tyr Arg Glu Val Val Ile Leu Glu Asp
 660 665 670
 Pro Gly Leu Pro Ala Leu Tyr Pro Cys Pro Ala Cys Glu Glu Lys Leu
 675 680 685
 Ala Leu Pro Thr Ala Ala Leu Tyr Gly Leu Arg Leu Glu Arg Glu Ala
 690 695 700
 Gly Glu Gly Trp Ala Ser Glu Ala Gly Lys Pro Leu Leu His Pro Val
 705 710 715 720
 Arg Pro Gly His Pro Leu Pro Leu Leu Leu Pro Ala Cys Gly His His

725 730 735
 His Ala Pro Met Pro Asp Tyr Ser Cys Leu Lys Pro Pro Lys Ala Gly
 740 745 750
 Glu Glu Gly His Glu Gly Cys Ser Tyr Thr Met Cys Pro Glu Gly Arg
 755 760 765
 Tyr Gly His Pro Gly Tyr Pro Ala Leu Val Thr Tyr Ser Tyr Gly Gly
 770 775 780
 Ala Val Pro Ser Tyr Cys Pro Ala Tyr Gly Arg Val Pro His Ser Cys
 785 790 795 800
 Gly Ser Pro Gly Glu Gly Arg Gly Tyr Pro Ser Pro Gly Ala His Ser
 805 810 815
 Pro Arg Ala Gly Ser Ile Ser Pro Gly Ser Pro Pro Tyr Pro Gln Ser
 820 825 830
 Arg Lys Leu Ser Tyr Glu Ile Pro Thr Glu Glu Gly Gly Asp Arg Tyr
 835 840 845
 Pro Leu Pro Gly His Leu Ala Ser Ala Gly Pro Leu Ala Ser Ala Glu
 850 855 860
 Ser Leu Glu Pro Val Ser Trp Arg Glu Gly Pro Ser Gly His Ser Thr
 865 870 875 880
 Leu Pro Arg Ser Pro Arg Asp Ala Pro Cys Ser Ala Ser Ser Glu Leu
 885 890 895
 Ser Gly Pro Ser Thr Pro Leu His Thr Ser Ser Pro Val Gln Gly Lys
 900 905 910
 Glu Ser Thr Arg Arg Gln Asp Thr Arg Ser Pro Thr Ser Ala Pro Thr
 915 920 925
 Gln Arg Leu Ser Pro Gly Glu Ala Leu Pro Pro Val Ser Gln Ala Gly
 930 935 940
 Thr Gly Lys Ala Pro Glu Leu Pro Ser Gly Ser Gly Pro Glu Pro Leu
 945 950 955 960
 Ala Pro Ser Pro Val Ser Pro Thr Phe Pro Pro Ser Ser Pro Ser Asp
 965 970 975
 Trp Pro Gln Glu Arg Ser Pro Gly Gly His Ser Asp Gly Ala Ser Pro
 980 985 990
 Arg Ser Pro Val Pro Thr Thr Leu Pro Gly Leu Arg His Ala Pro Trp
 995 1000 1005
 Gln Gly Pro Arg Gly Pro Pro Asp Ser Pro Asp Gly Ser Pro Leu Thr
 1010 1015 1020
 Pro Val Pro Ser Gln Met Pro Trp Leu Val Ala Ser Pro Glu Pro Pro
 1025 1030 1035 1040
 Gln Ser Ser Pro Thr Pro Ala Phe Pro Leu Ala Ala Ser Tyr Asp Thr
 1045 1050 1055
 Asn Gly Leu Ser Gln Pro Pro Leu Pro Glu Lys Arg His Leu Pro Gly
 1060 1065 1070
 Pro Gly Gln Gln Pro Gly Pro Trp Gly Pro Glu Gln Ala Ser Ser Pro
 1075 1080 1085
 Ala Arg Gly Ile Ser His His Val Thr Phe Ala Pro Leu Leu Ser Asp
 1090 1095 1100
 Asn Val Pro Gln Thr Pro Glu Pro Pro Thr Gln Glu Ser Gln Ser Asn
 1105 1110 1115 1120
 Val Lys Phe Val Gln Asp Thr Ser Lys Phe Trp Tyr Lys Pro His Leu
 1125 1130 1135
 Ser Arg Asp Gln Ala Ile Ala Leu Leu Lys Asp Lys Asp Pro Gly Ala
 1140 1145 1150
 Phe Leu Ile Arg Asp Ser His Ser Phe Gln Gly Ala Tyr Gly Leu Ala

1155 1160 1165
 Leu Lys Val Ala Thr Pro Pro Pro Ser Ala Gln Pro Trp Lys Gly Asp
 1170 1175 1180
 Pro Val Glu Gln Leu Val Arg His Phe Leu Ile Glu Thr Gly Pro Lys
 1185 1190 1195 1200
 Gly Val Lys Ile Lys Gly Cys Pro Ser Glu Pro Tyr Phe Gly Ser Leu
 1205 1210 1215
 Ser Ala Leu Val Ser Gln His Ser Ile Ser Pro Ile Ser Leu Pro Cys
 1220 1225 1230
 Cys Leu Arg Ile Pro Ser Lys Asp Pro Leu Glu Glu Thr Pro Glu Ala
 1235 1240 1245
 Pro Val Pro Thr Asn Met Ser Thr Ala Ala Asp Leu Leu Arg Gln Gly
 1250 1255 1260
 Ala Ala Cys Ser Val Leu Tyr Leu Thr Ser Val Glu Thr Glu Ser Leu
 1265 1270 1275 1280
 Thr Gly Pro Gln Ala Val Ala Arg Ala Ser Ser Ala Ala Leu Ser Cys
 1285 1290 1295
 Ser Pro Arg Pro Thr Pro Ala Val Val His Phe Lys Val Ser Ala Gln
 1300 1305 1310
 Gly Ile Thr Leu Thr Asp Asn Gln Arg Lys Leu Phe Phe Arg Arg His
 1315 1320 1325
 Tyr Pro Val Asn Ser Ile Thr Phe Ser Ser Thr Asp Pro Gln Asp Arg
 1330 1335 1340
 Arg Trp Thr Asn Pro Asp Gly Thr Thr Ser Lys Ile Phe Gly Phe Val
 1345 1350 1355 1360
 Ala Lys Lys Pro Gly Ser Pro Trp Glu Asn Val Cys His Leu Phe Ala
 1365 1370 1375
 Glu Leu Asp Pro Asp Gln Pro Ala Gly Ala Ile Val Thr Phe Ile Thr
 1380 1385 1390
 Lys Val Leu Leu Gly Gln Arg Lys
 1395 1400

<210> 805

<211> 550

<212> DNA

<213> Homo sapiens

<400> 805

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 atgggcagac ccagaaaatc tcgccaagta ccccatcatc gggaggccag cagcacaatt
 120
 agtcattcat ttacttatca agctgttact gtgtgtgcaa gaagcgccag agagatgata
 180
 tcaaggagct cttaccatgg ctggcataga gccgctgatg agtaagtcc gtctgcacaa
 240
 agagtcacct agcattcatt cttggctgac attcttggtc caggggggtc ccatggcctt
 300
 gttccctccc tcgggtcacc agttcaggtc gagggggcct atgcttgga gggccacacc
 360
 aatggacctt gccaggacac tcagtcacag gtttcacacc caaagagaag acagcccaac
 420
 ccagaccctc aaaagagagc acctggggga agggagcgtg gaaaccagga ctgagaaaga
 480

cacaagagaa aaagaagctg tacactgggg aggcctccgg ggtacctgtg cctgccatgt
 540
 ctctgaaggc
 550

<210> 806
 <211> 118
 <212> PRT
 <213> Homo sapiens

<400> 806
 Met Ala Gly Ile Glu Arg Leu Met Ser Lys Phe Arg Leu His Lys Glu
 1 5 10 15
 Ser Leu Ser Ile His Ser Trp Leu Thr Phe Leu Ala Gln Gly Val Ser
 20 25 30
 Met Ala Leu Phe Pro Ser Ser Gly His Gln Phe Arg Ser Arg Gly Pro
 35 40 45
 Met Leu Gly Arg Ala Thr Pro Met Asp Leu Ala Arg Thr Leu Ser His
 50 55 60
 Arg Phe His Thr Gln Arg Glu Asp Ser Pro Thr Gln Thr Leu Lys Arg
 65 70 75 80
 Glu His Leu Gly Glu Gly Ser Val Glu Thr Arg Thr Gln Lys Asp Thr
 85 90 95
 Arg Glu Lys Glu Ala Val His Trp Gly Gly Phe Arg Gly Thr Cys Ala
 100 105 110
 Cys His Val Ser Glu Gly
 115

<210> 807
 <211> 287
 <212> DNA
 <213> Homo sapiens

<400> 807
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 120
 ccgagtggtg cgaagctcag accgggacag gccgtatac cagcgcgagc gattatatct
 180
 ggcgccatg tatccaggac caggagcgaa gcgacggcct caggcagctt caaacgttga
 240
 tcaccgaggg gttcgacagc ggcacacgc cctcgtcgct tgaatgac
 287

<210> 808
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 808
 Met Ala Val Ala Leu Pro His Trp Gln Asp Ala Lys Phe Leu Ala Met
 1 5 10 15
 Ile Ser Arg Gly Gly Arg Ala Arg Gly Met Ala Thr Val Asn Val Ser

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                20                25                30
Leu Ser Asp Ala Met Thr Glu Trp Val Glu Ala Gln Thr Gly Thr Gly
                35                40                45
Arg Tyr Thr Ser Ala Ser Asp Tyr Ile Cys Ala Leu Ile Arg Gln Asp
                50                55                60
Gln Glu Arg Ser Asp Gly Leu Arg Gln Leu Gln Thr Leu Ile Thr Glu
        65                70                75                80
Gly Phe Asp Ser Gly Ile Ser Ala Ser Ser Leu Asp Asp
                85                90

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<210> 809

<211> 405

<212> DNA

<213> Homo sapiens

<400> 809

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gggccccccc ccccccccc cctttttttt ccccgggggg ttatttccca gggccaacag
120
gacggtggtt cgctcaaat ggagagacga tcggtgccgc ccttgcccca cgatcctgat
180
ggccccgaga ttcctgacga tgtcaccacc ctgcaccaac aggtaatggg tctgccacgt
240
cacctgggta tccactcagc tggaatgggt ctgacgcgag aaccagtagg acgcacatgc
300
ccattgagc cggtcgaat gtttggtcgc acggggctgc agtgggacaa anaaaactgt
360
gcctggatgg ggttggggaa gtttgatctg cttgggttgg ggatg
405

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<210> 810

<211> 135

<212> PRT

<213> Homo sapiens

<400> 810

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Xaa Gly Gly Gly Gly Gly Val Phe Phe Pro Pro Lys Lys Lys Lys
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Gly Gly Gly Gly Gly Pro Pro Pro Pro Pro Pro Leu Phe Phe Pro Arg
20     25     30
Gly Val Tyr Ser Gln Gly Gln Gln Asp Ala Trp Ser Arg Gln Met Glu
35     40     45
Arg Arg Ser Val Pro Pro Leu Pro His Asp Pro Asp Gly Pro Glu Ile
50     55     60
Pro Asp Asp Val Thr Thr Leu Ala Gln Gln Val Met Gly Leu Pro Arg
65     70     75     80
His Leu Gly Ile His Ser Ala Gly Met Val Leu Thr Arg Glu Pro Val
85     90     95
Gly Arg Ile Cys Pro Ile Glu Pro Ala Arg Met Phe Gly Arg Thr Gly
100    105    110
Leu Gln Trp Asp Lys Xaa Asn Cys Ala Trp Met Gly Leu Gly Lys Phe
115    120    125
Asp Leu Leu Gly Leu Gly Met

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130

135

<210> 811
 <211> 642
 <212> DNA
 <213> Homo sapiens

<400> 811
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 120
 tgggtgacaca ttaacaacac ccgggaagca gtactgccaa cacctagata tgagaaaaag
 180
 aaaacaggca cttaaagcga ggctaaccga ctttcaggaa tgataaaggg cagaggaccc
 240
 tgtcacctct acccctgcta ctaaaggcgt ggcccacaga gcagcagcac cagcagcaca
 300
 taaaaatggg ttaaatatga caggaaaaac aagggtgacag ggaatgggg tgaagatcaa
 360
 gtctcgtggta ngctcttctt tcttagagggc ttggggcctg agctcttgga gaaagctctc
 420
 caaacacctca ggggtgtgctt gtctccctgc cctgtgggga tgctcttctgt acgggtggct
 480
 gactggctcc cactttcctc cgtattgttg tcttgtctct tccctcacaa ccatcaaggc
 540
 tctttccctt aattctataa gacagtaacct ctgggttaga aattatatgc cctcctttaa
 600
 aaaaacgaaa tgctagagga catagaactt gaggaataat tt
 642

<210> 812
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 812
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 Pro Val Ser His Pro Tyr Lys Glu His Pro His Arg Ala Gly Glu Gln
 20 25 30
 Ala His Pro Glu Val Leu Glu Ser Phe Leu Gln Glu Leu Arg Pro Lys
 35 40 45
 Ala Ser Arg Lys Glu Arg Xaa Thr Thr Asn Leu Ile Phe Thr Pro Phe
 50 55 60
 Pro Cys His Leu Val Phe Pro Val Ile Phe Asn Pro Ile Leu Cys Ala
 65 70 75 80
 Ala Gly Ala Ala Ala Leu Trp Ala Thr Pro Leu Val Ala Gly Val Glu
 85 90 95
 Val Thr Gly Ser Ser Ala Leu Tyr His Ser
 100 105

<210> 813
 <211> 558

<212> DNA

<213> Homo sapiens

<400> 813

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cccgccgat agtcgcgtgg ggtcatggcg gatgaggggt taagagcgcg ttactgcgg
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120
gttcgctgac cagcaccggg ccgcccggtt gggccgggaa accgtggaac aagggaagcg
180
ggggcgccgc gcggggtgac gccttcggcc ccttcgcctt cggtcagcgt gcggcgcaat
240
tcgggggtcga ggatgatccg cggcccttcg atcttgacca cgatctccag ttgcccgcca
300
ttgttcttcg ccgcgacatc cagcgtgccg ccgcgcacca gcgcctcgtt ggcgatcagg
360
gcgaggttca gcatacactt cagcgcggac ttgggcagcg tctccgttcc caccaccag
420
ttgaattgcg tgcgcttatt gtcggcaacc agcccctcgt tcgcggtttt cgcttcgcgc
480
gcgtcgacct gttcccgcaa ccgcgcggcg gcgcagaagg cgaggcgga gaaattgagc
540
ttgttggcgg atacgcgt
558

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<210> 814

<211> 151

<212> PRT

<213> Homo sapiens

<400> 814

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Met Thr Phe Ser Ala Gly Ser Leu Thr Ser Thr Gly Pro Pro Gly Trp
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Ala Gly Lys Pro Trp Asn Lys Gly Ser Gly Gly Gly Ala Arg Gly Asp
20          25          30
Ala Phe Gly Pro Leu Ala Phe Gly Gln Arg Ala Ala Gln Phe Gly Val
35          40          45
Glu Asp Asp Pro Arg Pro Phe Asp Leu Asp His Asp Leu Gln Leu Pro
50          55          60
Ala Ile Val Phe Ala Ala Asp Ile Gln Arg Ala Ala Ala His Gln Arg
65          70          75          80
Leu Ala Gly Asp Gln Gly Glu Val Gln His Leu Gln Arg Gly Leu
85          90          95
Gly Gln Arg Leu Arg Phe His Pro Pro Val Glu Leu Arg Ala Leu Ile
100         105         110
Val Gly Asn Gln Pro Leu Val Arg Gly Phe Arg Phe Ala Arg Val Asp
115         120         125
Leu Phe Ala Glu Pro Ala Gly Gly Ala Glu Gly Glu Ala Glu Glu Phe
130         135         140
Glu Leu Val Gly Gly Tyr Ala
145         150

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<210> 815

<211> 315

<212> DNA

<213> Homo sapiens

<400> 815

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 caaagtggac gatgagaaag ctcacgacgc gccacacacg gatgggtcgg agcctggaca
 120
 agctagcgca ggagaaagcc gagacctcac gtcgaagcg gattcagcaa gtgcacaaac
 180
 ttctaccac gctgaggttt ccagtgaagt tactgctacg tccagtatag atgagcaggt
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 agacctcatt gctgcaccgt taagcgaaga gtccaatgtc agcaagctcg ggccgtcccc
 300
 tgaggccgat acatc
 315

<210> 816

<211> 90

<212> PRT

<213> Homo sapiens

<400> 816

Met Pro Ser Asp Leu Pro Lys Val Asp Asp Glu Lys Ala His Asp Ala
 1 5 10 15
 Pro His Thr Asp Gly Ser Glu Pro Gly Gln Ala Ser Ala Gly Glu Ser
 20 25 30
 Arg Asp Leu Thr Ser Glu Ala Asp Ser Ala Ser Ala Gln Pro Ser Thr
 35 40 45
 His Ala Glu Val Ser Ser Glu Val Thr Ala Thr Ser Ser Ile Asp Glu
 50 55 60
 Gln Val Asp Leu Ile Ala Ala Pro Leu Ser Glu Glu Ser Asn Val Ser
 65 70 75 80
 Lys Leu Gly Pro Ser Pro Glu Ala Asp Thr
 85 90

<210> 817

<211> 321

<212> DNA

<213> Homo sapiens

<400> 817

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 ctgaaggaa tcacacaata ttatgtctttt gttgaagagg ggcagaaggt tcaattgcctg
 120
 aatacaccttt tctcaaaagct tcaaattaat caatccatta tattctgcaa ctctgttaat
 180
 agtgttgagc tegtggctaa aaaaataact gaactcggtt attcatgctt ctacattcat
 240
 gctaagatgt tgcaagacca cagaaatcga gtattccatg attgtcgtaa tgggtgcttgc
 300
 agaaaaccttg tgtgcacaga t
 321

<210> 818
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 818
 Glu Phe Lys Glu Lys Tyr Leu Pro Arg Pro Tyr Val Ile Asn Leu Met
 1 5 10 15
 Asp Glu Leu Thr Leu Lys Gly Ile Thr Gln Tyr Tyr Ala Phe Val Glu
 20 25 30
 Glu Gly Gln Lys Val His Cys Leu Asn Thr Leu Phe Ser Lys Leu Gln
 35 40 45
 Ile Asn Gln Ser Ile Ile Phe Cys Asn Ser Val Asn Ser Val Glu Leu
 50 55 60
 Leu Ala Lys Lys Ile Thr Glu Leu Gly Tyr Ser Cys Phe Tyr Ile His
 65 70 75 80
 Ala Lys Met Leu Gln Asp His Arg Asn Arg Val Phe His Asp Cys Arg
 85 90 95
 Asn Gly Ala Cys Arg Asn Leu Val Cys Thr Asp
 100 105

<210> 819
 <211> 3422
 <212> DNA
 <213> Homo sapiens

<400> 819
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 gagggccctgc agcctggggg gactgccctg ggcctaaga agaggagccg saaggccggg
 120
 gcagggggccc atggactctc caaaggcccg ctggagaagc ggccctatct tggcccgggt
 180
 ctgcccttga ctccccgaga cagggccagt ggcacacaag gggccagtga ggacaactct
 240
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 360
 agctattcca agcggaagcg cctcactcgg ggccgggcca agaaccacac ctcttcaccc
 420
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 480
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 720
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900
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2100
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2160
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2220
gtttgtcccc tttccagtcc tccacccac ccctggagcc cagcctggga gcgcaaaacc
2280
caagaagcgg ccagaacgca cctccggctc cggcgagcgc gcgaccgtgt tgaccacca
2340
gggaccgccc cgcctactct gcacgggagc agggacagcg ctagatttcg tgtacaaaa
2400

ctgtgtaccc ctctatatat atgttacata gaatgtatat atgttgggaa catgctcgtc
 2460
 tctcccgtgt gtcgccgccc tgcgtcgtgc gcccgcaaca gagccccaac cgggccctttg
 2520
 cgggtaagg ggctaccgag acgccacttg tccacgcagc caccaccggc ccggggccagt
 2580
 ccttgccagt ccgtccgcct gtcgtccgtg gtcctcagct ctgtccacgc ttcgataggc
 2640
 ctgacgcagc ccccagccca gggccgcctt agcaacttcc tgtacatatg actgtaaaat
 2700
 ggtaaacgtg tgtattatat ctggcctcgt tatatatgtg atatatatgt atacatatat
 2760
 atatatataa tatatatgaa gactgtaaat gtttaagacga ctagtgttct tattagtata
 2820
 ttgcttcaca ctgaagattg tgtgtatcga cctgttttcta aaagatgttt attttcctta
 2880
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 2940
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 3000
 ggccttaggt tggggaatgg gaatgaaggg aggggctggg ggggggggca tgaatggagt
 3060
 cagggagtcg gcctttcaca gaacaggaaa cctccccgc cctgtgtccc cctctccagt
 3120
 gtggcggcag gtcgggaggg agggagcttc tttgctgtga aatgaccagg ggccgggagt
 3180
 ggggaggtga gacgtgccag acttcttgca gggagaccga agctgtagct cctgtcacac
 3240
 aacaggctcct ggaagtcagt ccatcctccc gtgccacca gggaccttgt gtcggagggg
 3300
 ggagggaag cctttgccta ggtgctgggg gagggcccaa gcactctcac tagtcagcac
 3360
 atccatcagc tgaagacaca aaaccagat tataaataat ttcattttta attctctgtg
 3420
 ca
 3422

<210> 820

<211> 494

<212> PRT

<213> Homo sapiens

<400> 820

Met	Asn	Ser	Lys	Lys	Leu	Ser	Ser	Thr	Asp	Cys	Phe	Lys	Thr	Glu	Ala
1			5					10					15		
Phe	Thr	Ser	Pro	Glu	Ala	Leu	Gln	Pro	Gly	Gly	Thr	Ala	Leu	Ala	Pro
			20					25				30			
Lys	Lys	Arg	Ser	Arg	Lys	Gly	Arg	Ala	Gly	Ala	His	Gly	Leu	Ser	Lys
			35			40					45				
Gly	Pro	Leu	Glu	Lys	Arg	Pro	Tyr	Leu	Gly	Pro	Ala	Leu	Pro	Leu	Thr
			50			55					60				
Pro	Arg	Asp	Arg	Ala	Ser	Gly	Thr	Gln	Gly	Ala	Ser	Glu	Asp	Asn	Ser
65				70						75				80	
Gly	Gly	Gly	Gly	Lys	Lys	Pro	Lys	Met	Glu	Glu	Leu	Gly	Leu	Ala	Ser

```

      85              90              95
His Pro Pro Glu Gly Arg Pro Cys Gln Pro Gln Thr Arg Ala Gln Lys
      100              105              110
Gln Pro Gly His Thr Asn Tyr Ser Ser Tyr Ser Lys Arg Lys Arg Leu
      115              120              125
Thr Arg Gly Arg Ala Lys Asn Thr Thr Ser Ser Pro Cys Lys Gly Arg
      130              135              140
Ala Lys Arg Arg Arg Gln Gln Gln Val Leu Pro Leu Asp Pro Ala Glu
      145              150              155
Pro Glu Ile Arg Leu Lys Tyr Ile Ser Ser Cys Lys Arg Leu Arg Ser
      165              170              175
Asp Ser Arg Thr Pro Ala Phe Ser Pro Phe Val Arg Val Glu Lys Arg
      180              185              190
Asp Ala Phe Thr Thr Ile Cys Thr Val Val Asn Ser Pro Gly Asp Ala
      195              200              205
Pro Lys Pro His Arg Lys Pro Ser Ser Ser Ala Ser Ser Ser Ser
      210              215              220
Ser Ser Ser Phe Ser Leu Asp Ala Ala Gly Ala Ser Leu Ala Thr Leu
      225              230              235
Pro Gly Gly Ser Ile Leu Gln Pro Arg Pro Ser Leu Pro Leu Ser Ser
      245              250              255
Thr Met His Leu Gly Pro Val Val Ser Lys Ala Leu Ser Thr Ser Cys
      260              265              270
Leu Val Cys Cys Leu Cys Gln Asn Pro Ala Asn Phe Lys Asp Leu Gly
      275              280              285
Asp Leu Cys Gly Pro Tyr Tyr Pro Glu His Cys Leu Pro Lys Lys Lys
      290              295              300
Pro Lys Leu Lys Glu Lys Val Arg Pro Glu Gly Thr Cys Glu Glu Ala
      305              310              315
Ser Leu Pro Leu Glu Arg Thr Leu Lys Gly Pro Glu Cys Ala Ala Ala
      325              330              335
Ala Thr Ala Gly Lys Pro Pro Arg Pro Asp Gly Pro Ala Asp Pro Ala
      340              345              350
Lys Gln Gly Pro Leu Arg Thr Ser Ala Arg Gly Leu Ser Arg Arg Leu
      355              360              365
Gln Ser Cys Tyr Cys Cys Asp Gly Arg Glu Asp Gly Glu Glu Ala
      370              375              380
Ala Pro Ala Asp Lys Gly Arg Lys His Glu Cys Ser Lys Glu Ala Pro
      385              390              395
Ala Glu Pro Gly Gly Glu Ala Gln Glu His Trp Val His Glu Ala Cys
      405              410              415
Ala Val Trp Thr Gly Gly Val Tyr Leu Val Ala Gly Lys Leu Phe Gly
      420              425              430
Leu Gln Glu Ala Met Lys Val Ala Val Asp Met Met Cys Ser Ser Cys
      435              440              445
Gln Glu Ala Gly Ala Thr Ile Gly Cys Cys His Lys Gly Cys Leu His
      450              455              460
Thr Tyr His Tyr Pro Cys Ala Ser Asp Ala Gly Cys Ile Phe Ile Glu
      465              470              475
Glu Asn Phe Ser Leu Lys Cys Pro Lys His Lys Arg Leu Pro
      485              490

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<210> 821

<211> 420

<212> DNA

<213> Homo sapiens

<400> 821

acgcgtcccg tcacctgcgg tatggaccaa gtgagttgtg tgctcgacaa tgggttcgcc
 60
 gccatcatgg atgtgccggg ttcaactat cgcgcccatc gttacaccga agccatcgg
 120
 cgtttgcgcg aaaatgtggt gctaggttcg gaaacgacct cgacggtgag cagccgtggt
 180
 gtctacaagt ttctgttgtt gctgaagtcc gatgccatct atcccgacca tcagtcgtca
 240
 ggctacgaca cagagtattg ttctgtgtcg aacacccccg atgtcgattt cgccctcgcc
 300
 gaagactatc cctggacgat ggggcagttt gctggacgg gcttcgacta cctcggtgaa
 360
 ccttcgcctt acgacaccga tgcctggccc tctcagcct cctctctcgg cattgtcgac
 420

<210> 822

<211> 133

<212> PRT

<213> Homo sapiens

<400> 822

Met	Asp	Gln	Val	Ser	Cys	Val	Leu	Asp	Asn	Gly	Phe	Ala	Ala	Ile	Met
1				5					10					15	
Asp	Val	Pro	Gly	Phe	Asn	Tyr	Arg	Ala	His	Arg	Tyr	Thr	Glu	Ala	Tyr
			20					25					30		
Arg	Arg	Leu	Pro	Gln	Asn	Val	Val	Leu	Gly	Ser	Glu	Thr	Thr	Ser	Thr
			35				40					45			
Val	Ser	Ser	Arg	Gly	Val	Tyr	Lys	Phe	Pro	Val	Val	Leu	Lys	Ser	Asp
			50				55				60				
Ala	Ile	Tyr	Pro	Asp	His	Gln	Ser	Ser	Gly	Tyr	Asp	Thr	Glu	Tyr	Cys
			65			70				75				80	
Ser	Trp	Ser	Asn	Thr	Pro	Asp	Val	Asp	Phe	Ala	Leu	Ala	Glu	Asp	Tyr
			85					90					95		
Pro	Trp	Thr	Met	Gly	Gln	Phe	Val	Trp	Thr	Gly	Phe	Asp	Tyr	Leu	Gly
			100					105					110		
Glu	Pro	Ser	Pro	Tyr	Asp	Thr	Asp	Ala	Trp	Pro	Ser	His	Ala	Ser	Leu
			115				120					125			
Phe	Gly	Ile	Val	Asp											
			130												

<210> 823

<211> 550

<212> DNA

<213> Homo sapiens

<400> 823

tctagattct tgggcagccg agccctctt gaattectca gcctaccatc atgatcaaca
 60
 cctcccatgt tccgtccatg aatgaccgca ctgacagcac tggagagatt taatgggtca
 120

ccaattgagg cagtgaaggc actcatggca ctcagagctg gaatggggct gatctgagtt
 180
 gtactgttga ctgcagtggt gatgacaacc tgcattcctt tgctggctgc atcgacaact
 240
 gctttgtaaa tggcatctac ggaagcatca cctgggccac ccacaacgag gccatccttc
 300
 acctgttgac caagagatgg gtcaatcctc ggttgcaact cacaagggtgt atcttgaaaa
 360
 ggtggaagtg tagtggttgg attctcagga agtgcgtgta gccacggctg agtgcttatt
 420
 cttttgttta ggagagctgc atcttcctgc attctcacct gaaagtcttg aaacagacaa
 480
 gccatggggg tattgttagc tgggcaagga attgtggact gtccttgga cgcctggaga
 540
 ttctggtacc
 550

<210> 824

<211> 161

<212> PRT

<213> Homo sapiens

<400> 824

Met	Ala	Leu	Phe	Gln	Asn	Phe	Gln	Val	Arg	Met	Gln	Glu	Asp	Ala
1			5				10				15			
Ala	Leu	Leu	Asn	Lys	Arg	Ile	Ser	Thr	Gln	Pro	Gly	Leu	Thr	Ala
			20				25				30			
Pro	Glu	Asn	Pro	Asn	Thr	Thr	Leu	Pro	Pro	Phe	Gln	Asp	Thr	Pro
		35				40				45				Cys
Glu	Leu	Gln	Pro	Arg	Ile	Asp	Pro	Ser	Leu	Gly	Gln	Gln	Val	Lys
		50				55				60				Asp
Gly	Leu	Val	Val	Gly	Gly	Pro	Gly	Asp	Ala	Ser	Val	Asp	Ala	Ile
65			70					75						80
Lys	Ala	Val	Val	Asp	Ala	Ala	Ser	Lys	Gly	Met	Gln	Val	Val	Ile
			85					90						95
Thr	Ala	Val	Asn	Ser	Thr	Thr	Gln	Ile	Ser	Pro	Ile	Pro	Ala	Leu
			100					105					110	Ser
Ala	Met	Ser	Ala	Phe	Thr	Ala	Ser	Ile	Gly	Asp	Pro	Leu	Asn	Leu
		115				120				125				Ser
Ser	Ala	Val	Ser	Ala	Val	Ile	His	Gly	Arg	Asn	Met	Gly	Gly	Val
		130				135				140				Asp
His	Asp	Gly	Arg	Leu	Arg	Asn	Ser	Arg	Gly	Ala	Arg	Leu	Pro	Lys
145				150						155				160
Leu														

<210> 825

<211> 327

<212> DNA

<213> Homo sapiens

<400> 825

gcgtttgcga ccggccgtaa ccgcagaat gcggcggtgt gttgcaactga ggggtattttg
 60

cagttgctgg atgagcgcgga gatgcgcggc gtgctcggcc acgagctgat gcacgtgtac
 120
 aaccgcgata tcttcacctc ttccgtggcg gcgggtatcg cctccatcat cggtagcatt
 180
 gcgcagattc ttctgtttgg cgcgatgttc ggtggatcca accgcgatgg tgaacgttcc
 240
 aacccccctc ccatgttcgt ggttctatg ctggctccca ttgtactca ggtcatccag
 300
 atggctatta gccgcacccg tgaattc
 327

<210> 826

<211> 109

<212> PRT

<213> Homo sapiens

<400> 826

Ala Phe Ala Thr Gly Arg Asn Pro Gln Asn Ala Ala Val Cys Cys Thr
 1 5 10 15
 Glu Gly Ile Leu Gln Leu Leu Asp Glu Met Arg Gly Val Leu
 20 25 30
 Gly His Glu Leu Met His Val Tyr Asn Arg Asp Ile Leu Thr Ser Ser
 35 40 45
 Val Ala Ala Gly Ile Ala Ser Ile Ile Gly Thr Ile Ala Gln Ile Leu
 50 55 60
 Ser Phe Gly Ala Met Phe Gly Gly Ser Asn Arg Asp Gly Glu Arg Ser
 65 70 75 80
 Asn Pro Leu Ala Met Phe Val Val Ala Met Leu Ala Pro Ile Ala Thr
 85 90 95
 Gln Val Ile Gln Met Ala Ile Ser Arg Thr Arg Glu Phe
 100 105

<210> 827

<211> 534

<212> DNA

<213> Homo sapiens

<400> 827

nacgcgtacg tcaatatgca tcgtccagtc gttatcgcaa cgcgaaatc gatgctgcgc
 60
 aacaagatgg cgacctcgga tcccgaagag ttaccaccg gttagtgggc tcctgttcta
 120
 cccgaccat cgatcaccga cccgacggcc gttacgagga ttatcttggt ctctggcaag
 180
 gcgcgggtgg agctggtcaa gcaacgtaag gccgccagtc ttgacggaca gctcgccatc
 240
 atcccgatgg agcgtctcta cccgctacca gtcgacgagt tggctgaggt ttttgcgcct
 300
 tacaccaacg tcacggatgt ccgctgggtc caagaagagc cagagaacca gggcgccctg
 360
 tactacatgc tgaccacact gcccagggcc atgtcggaga agctgccagg attctttgat
 420
 gggtttagtc gcatcaccg cccaccgtcc tcagctccgt cggtagggaca gcacagcgtc
 480

cacatccgtg aagagcagga gttactcgag aaggctatag cctgagcgac ctga
534

<210> 828
<211> 174
<212> PRT
<213> Homo sapiens

<400> 828
Xaa Ala Tyr Val Asn Met His Arg Pro Val Val Ile Ala Thr Pro Lys
1 5 10 15
Ser Met Leu Arg Asn Lys Met Ala Thr Ser Asp Pro Glu Glu Phe Thr
20 25 30
Thr Gly Arg Trp Arg Pro Val Leu Pro Asp Pro Ser Ile Thr Asp Pro
35 40 45
Thr Ala Val Thr Arg Ile Ile Leu Cys Ser Gly Lys Ala Arg Trp Glu
50 55 60
Leu Val Lys Gln Arg Lys Ala Ala Ser Leu Asp Gly Gln Leu Ala Ile
65 70 75 80
Ile Pro Met Glu Arg Leu Tyr Pro Leu Pro Val Asp Glu Leu Ala Glu
85 90 95
Val Phe Ala Pro Tyr Thr Asn Val Thr Asp Val Arg Trp Val Gln Glu
100 105 110
Glu Pro Glu Asn Gln Gly Ala Trp Tyr Tyr Met Leu Thr His Leu Pro
115 120 125
Gln Ala Met Ser Glu Lys Leu Pro Gly Phe Phe Asp Gly Leu Val Gly
130 135 140
Ile Thr Arg Pro Pro Ser Ser Ala Pro Ser Val Gly Gln His Ser Val
145 150 155 160
His Ile Arg Glu Glu Gln Glu Leu Leu Glu Lys Ala Ile Ala
165 170

<210> 829
<211> 492
<212> DNA
<213> Homo sapiens

<400> 829
nagtgcccg gtggccggcg ggtgccagcc gccatggagg ccgtgccccg catgccccatg
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atctggctgg acctgaagga ggccggtgac ttctacttcc agccagctgt gaagaagttt
120
gtcctgaaga attatggaga gaacccagaa gcctacaatg aagaactgaa gaagctggag
180
ttgctcagac agaagtgtgt ccgtgtccca cgagacttgg agggctgtag tgtcctccgc
240
aagtaacctcg gccagcttca ttacctgcag agtcgggtcc ccatgggctc gggccaggag
300
gcgcgtgtcc ctgtcacatg gacagagatc ttctcaggca agtctgtggc ccatgaggac
360
atcaagtacg agcaggcctg tatcttctcc aacnttggag cgctgcactc catgctgggg
420
gccatggaca agcgggtgtc tgaggagggc atgaaggtct cctgtaccca tttccagtgc
480

gcagccggcg cc
492

<210> 830
<211> 164
<212> PRT
<213> Homo sapiens

<400> 830
Xaa Trp Pro Gly Gly Arg Arg Val Pro Ala Ala Met Glu Ala Val Pro
1 5 10 15
Arg Met Pro Met Ile Trp Leu Asp Leu Lys Glu Ala Gly Asp Phe His
20 25 30
Phe Gln Pro Ala Val Lys Lys Phe Val Leu Lys Asn Tyr Gly Glu Asn
35 40 45
Pro Glu Ala Tyr Asn Glu Glu Leu Lys Lys Leu Leu Leu Arg Gln
50 55 60
Asn Ala Val Arg Val Pro Arg Asp Phe Glu Gly Cys Ser Val Leu Arg
65 70 75 80
Lys Tyr Leu Gly Gln Leu His Tyr Leu Gln Ser Arg Val Pro Met Gly
85 90 95
Ser Gly Gln Glu Ala Ala Val Pro Val Thr Trp Thr Glu Ile Phe Ser
100 105 110
Gly Lys Ser Val Ala His Glu Asp Ile Lys Tyr Glu Gln Ala Cys Ile
115 120 125
Phe Ser Asn Xaa Gly Ala Leu His Ser Met Leu Gly Ala Met Asp Lys
130 135 140
Arg Val Ser Glu Glu Gly Met Lys Val Ser Cys Thr His Phe Gln Cys
145 150 155 160
Ala Ala Gly Ala

<210> 831
<211> 303
<212> DNA
<213> Homo sapiens

<400> 831
gcgttgctgc ggcgtggcga gaccatgacg gcggagaatc agcgtgccaa tgtgcgcatc
60
gccgcaaac acatcaagga ggttgcggtc gatcacgagg tcgttgtagc ccattgtaat
120
ggccccacg taggtctgtt ggctctgc aa tcgacacgct acgaggaagt cggtatctat
180
ccgctggatg tcctggggcg agagtcacag gccatgatcg gctacatgat cgagcaggaa
240
ctcgccaatg tgatgctca ggatcagcag atcgctacca tgatcacgat gacagtcgct
300
gac
303

<210> 832
<211> 101
<212> PRT

<213> Homo sapiens

<400> 832

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Ala Leu Leu Arg Arg Gly Glu Thr Met Thr Ala Glu Asn Gln Arg Ala
 1             5             10             15
Asn Val Arg Ile Ala Ala Asn His Ile Lys Glu Val Ala Val Asp His
 20             25             30
Glu Val Val Val Ala His Gly Asn Gly Pro Gln Val Gly Leu Leu Ala
 35             40             45
Leu Gln Ser Thr Ala Tyr Glu Glu Val Gly Ile Tyr Pro Leu Asp Val
 50             55             60
Leu Gly Ala Glu Ser Gln Ala Met Ile Gly Tyr Met Ile Glu Gln Glu
 65             70             75             80
Leu Gly Asn Val Met Pro Gln Asp Gln Gln Ile Val Thr Met Ile Thr
 85             90             95
Met Thr Val Val Asp
100

```

<210> 833

<211> 466

<212> DNA

<213> Homo sapiens

<400> 833

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nngatccgcg cgcgcgcgacga ggcgggtgcg tgatgttgac agcgaaaatg cgcagccggc
 60
catttgacga gggctgaaaa cgtcttctac cggctctgctg tgcgccttgg tgtcagcaaa
120
cgacgccatg atcgtccagt gggatcgcg ttgttctgcg gcgctggggg attcagttgc
180
ggattccacc aggcgggggtg gcatgttgcg gcggcggttg agcacgacgt gtcggcgctc
240
ctgacctatg tcattgaatct cgctcggccc ggcgtcaaga ttcacatcga ccccgagcac
300
cgggagcttg gcccaagacc accgcgaacc aagaagaaga gcggcgcgcg agtcgcttc
360
gatgcgcgat tcggaactgg gtggatcgcc agcgagcccc ccgacgatcc cggctcgcaa
420
catttctacg tgtacgacgt caagaacctc agcgcgcgagc ggatcc
466

```

<210> 834

<211> 142

<212> PRT

<213> Homo sapiens

<400> 834

```

Gln Arg Lys Cys Ala Ala Gly His Leu Thr Arg Ala Glu Asn Val Phe
 1             5             10             15
Tyr Arg Ser Ala Val Pro Pro Gly Val Ser Lys Arg Arg His Asp Arg
 20             25             30
Pro Val Gly Ile Asp Leu Phe Cys Gly Ala Gly Gly Phe Ser Cys Gly
 35             40             45
Phe His Gln Ala Gly Trp His Val Ala Ala Ala Val Glu His Asp Val

```

```

      50              55              60
Ser Ala Ser Leu Thr Tyr Val Met Asn Leu Ala Arg Pro Gly Val Lys
65              70              75              80
Ile His Ile Asp Pro Glu His Pro Glu Leu Gly Pro Arg Pro Arg
      85              90              95
Thr Lys Lys Lys Ser Gly Gly Ala Val Pro Phe Asp Ala His Val Gly
      100              105              110
Thr Gly Trp Ile Ala Ser Glu Pro Ala Asp Asp Pro Gly Cys Glu His
      115              120              125
Phe Tyr Val Tyr Asp Val Lys Asn Leu Ser Gly Glu Arg Ile
      130              135              140

```

<210> 835
 <211> 482
 <212> DNA
 <213> Homo sapiens

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<400> 835
acgcgtgaag ggattttgat caccagaac aaccacctgt ctttttagat caagaagcag
60
aagctcagag caaagaacat cacaccacgt ccttcagtga ttgaagcagt gattgagtca
120
cagaataaat ctggaactca ggtcttctga tctttgtccc agatgttaga gacaaaacta
180
aaagtaaaat accaagtga atcaaagcat cagattgag ccagaacat gaaaagaagc
240
ttcttgcccc acttgagaaa ctgttaaacc ggacatacct ttggggactt cttcccttct
300
ctggaataag attgatgttt ccatgctgtg aaagacgatg atgttccttc tcccagattc
360
ctgctgtctt caaaaggcct agcaaaaaacc actgctgctg ggtgcagttg agaaagggaa
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tgaagaacaa tcccatggcc atgcaggcac tctccccc cactctctcg cctttcacgc
480
gt
482

```

<210> 836
 <211> 120
 <212> PRT
 <213> Homo sapiens

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<400> 836
Met Ala Met Gly Leu Phe Phe Ile Pro Phe Leu Asn Cys Thr Gln Gln
1      5      10      15
Gln Trp Phe Leu Leu Gly Leu Leu Lys Thr Ala Gly Ile Trp Glu Lys
      20      25      30
Glu His His Arg Leu Ser Gln His Gly Asn Ile Asn Leu Ile Pro Glu
      35      40      45
Lys Gly Arg Ser Pro Gln Arg Tyr Val Arg Phe Asn Ser Phe Ser Ser
      50      55      60
Gly Pro Gly Ser Ser Phe Ser Cys Ser Gly Leu Asn Arg Asp Ala Leu
65      70      75      80
Ile Ser Leu Gly Ile Leu Leu Leu Val Leu Ser Leu Thr Ser Gly Ala

```

```

      85              90              95
Lys Ile Arg Arg Pro Glu Phe Gln Ile Tyr Ser Val Thr Gln Ser Leu
      100              105              110
Leu Gln Ser Leu Arg Asp Val Val
      115              120

```

<210> 837
 <211> 509
 <212> DNA
 <213> Homo sapiens

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<400> 837
acgcgtggac ccccgctctg cccgcctttg cagtcacgc cctccctgaa gtcaccgcgtg
60
cagaaatacg caggcactga cctgggggta cagccaggca agggagagac gaggggctca
120
ctctgcacca gccaaaggcct gtgtcctggc atggctcccc caggaagcga ggatggcggt
180
gcctggcggt cgagcccttc ttatcctggg gaatgctggg gggcgcttct gaggagacct
240
gcctgctgcc cctgctggct ggcactgccc ctcccccggg gaaaggttgg gtgtgcccc
300
caggggaact caaagcaggg gagcccttgg agggcccaag tccctggaat atcttggcgc
360
tcagatggcc cccctcgaac accctcacac gggggggcgc cgcggtggga ggtgaccacg
420
cagccactct tacttggcga agacttttct cccaatgcga gcgcgggtgg tatcagcctg
480
agccttcagg ttggtgaggc tgggggtacc
509

```

<210> 838
 <211> 119
 <212> PRT
 <213> Homo sapiens

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<400> 838
Met Ala Pro Pro Gly Ser Glu Asp Gly Gly Ala Trp Arg Ser Ser Pro
1      5      10      15
Ser Tyr Pro Gly Glu Cys Trp Gly Ala Phe Leu Ser Arg Pro Ala Cys
      20      25      30
Cys Pro Cys Trp Leu Ala Leu Pro Leu Pro Arg Gly Lys Val Gly Trp
      35      40      45
Ser Pro Gln Gly Asn Ser Lys Gln Gly Ser Pro Trp Arg Pro Gln Val
      50      55      60
Pro Gly Ile Ser Trp Arg Ser Asp Gly Pro Pro Arg Thr Pro Ser His
      65      70      75      80
Gly Gly Ala Ala Arg Trp Glu Val Thr Gln Pro Leu Leu Leu Gly
      85      90      95
Glu Asp Phe Ser Pro Asn Ala Ser Ala Gly Gly Ile Ser Leu Ser Leu
      100      105      110
Gln Val Gly Glu Ala Gly Val
      115

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<210> 839
 <211> 347
 <212> DNA
 <213> Homo sapiens

<400> 839
 acgcgtctcg tgttcgtgcg gcacggcagg acggcggttca atgtggagggt tcggctccag
 60
 ggccgtctcg acatgccgtt ggatgaggtg gggcgccgtc aggcactcac agtgggtcaa
 120
 gtcatgcgcg agatggaacc tgacgcgac atggcctctc cgctacaacg tgcgcgcgac
 180
 acagctcagg caatcggtgc ttgtgctgga ttgggcgtac agctggatga tcgactcatc
 240
 gagatcgatg tcggacgttg gtcgggacaa cgggctgcgg acctgcgtcg caacgatcct
 300
 gagtacgcag caagtgtggt cagccctatc gattaccggg tcgggagn
 347

<210> 840
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 840
 Thr Arg Leu Val Phe Val Arg His Gly Arg Thr Ala Phe Asn Val Glu
 1 5 10 15
 Gly Arg Leu Gln Gly Arg Leu Asp Met Pro Leu Asp Glu Val Gly Arg
 20 25 30
 Arg Gln Ala Leu Thr Val Ala Gln Val Ile Ala Glu Met Glu Pro Asp
 35 40 45
 Ala Ile Met Ala Ser Pro Leu Gln Arg Ala Arg Asp Thr Ala Gln Ala
 50 55 60
 Ile Gly Ala Cys Ala Gly Leu Gly Val Gln Leu Asp Asp Arg Leu Ile
 65 70 75 80
 Glu Ile Asp Val Gly Arg Trp Ser Gly Gln Arg Ala Ala Asp Leu Arg
 85 90 95
 Arg Asn Asp Pro Glu Tyr Ala Ala Ser Val Val Ser Pro Ile Asp Tyr
 100 105 110
 Arg Val Gly
 115

<210> 841
 <211> 351
 <212> DNA
 <213> Homo sapiens

<400> 841
 tcgggaactc accccgacgc cgtcattatg gacgtcatga tgccgcgtct agatggcttg
 60
 gaagccaccc ggatgctgcg cagcaatggc aacgacgtcc cgatcctcgt cctcaccggc
 120
 cgcgatgctg tcgacgatcg cgttgacggc ctgcagcgtg gcgccgatga ctacatggtc
 180

aagcccttcg cctcgcacga actcctcgct cgcctacgcg cctcactcgc tcgtcccg
 240
 cccgagccag agcaaaacga ggcccttgaa caactctcct tcgctgacct cacccttgat
 300
 ccaggcaccg gcgagatcac ccgcgggaac cgctgcatca gtttgacgcy t
 351

<210> 842
 <211> 117
 <212> PRT
 <213> Homo sapiens

<400> 842
 Ser Gly Thr His Pro Asp Ala Val Ile Met Asp Val Met Met Pro Arg
 1 5 10 15
 Leu Asp Gly Leu Glu Ala Thr Arg Met Leu Arg Ser Asn Gly Asn Asp
 20 25 30
 Val Pro Ile Leu Val Leu Thr Ala Arg Asp Ala Val Asp Asp Arg Val
 35 40 45
 Asp Gly Leu Asp Ala Gly Ala Asp Asp Tyr Met Val Lys Pro Phe Ala
 50 55 60
 Leu Asp Glu Leu Leu Ala Arg Leu Arg Ala Leu Thr Arg Arg Ser Arg
 65 70 75 80
 Pro Glu Pro Glu Gln Asn Glu Ala Pro Glu Gln Leu Ser Phe Ala Asp
 85 90 95
 Leu Thr Leu Asp Pro Gly Thr Arg Glu Ile Thr Arg Gly Asn Arg Arg
 100 105 110
 Ile Ser Leu Thr Arg
 115

<210> 843
 <211> 393
 <212> DNA
 <213> Homo sapiens

<400> 843
 ctagcccagg ctctcgcca cgaggggctg cgcgctgtgg cctctggggc aaaccgggc
 60
 ggccctcaagc gcggtatcga gaaggctgtc gacgccgttg tggaggagct ccgctctatc
 120
 tcgcgcgcca tcgacaccac ctcggacatg gccagcgttg ccaccatctc cagccgtgac
 180
 gagaccatcg gcgccctcat cgctgaggcc ttgcacaagg ttgtaagga cggggttatc
 240
 accgtcgacg agtcgcagac ctcggcact gagcttgact tcaccgagg catgcagttc
 300
 gacaaggggt acctgtcgcc ctacatggtc accgaccagg ttcgcatgga ggctgtgatc
 360
 gaggatcctt acatcctcat tcactccgc aag
 393

<210> 844
 <211> 131
 <212> PRT

<213> Homo sapiens

<400> 844

```

Leu Ala Gln Ala Leu Val His Glu Gly Leu Arg Ala Val Ala Ser Gly
 1           5           10           15
Ala Asn Pro Val Gly Leu Lys Arg Gly Ile Glu Lys Ala Val Asp Ala
 20           25           30
Val Val Glu Glu Leu Arg Ser Ile Ser Arg Ala Ile Asp Thr Thr Ser
 35           40           45
Asp Met Ala Ser Val Ala Thr Ile Ser Ser Arg Asp Glu Thr Ile Gly
 50           55           60
Ala Leu Ile Ala Glu Ala Phe Asp Lys Val Gly Lys Asp Gly Val Ile
 65           70           75           80
Thr Val Asp Glu Ser Gln Thr Phe Gly Thr Glu Leu Asp Phe Thr Glu
 85           90           95
Gly Met Gln Phe Asp Lys Gly Tyr Leu Ser Pro Tyr Met Val Thr Asp
100           105           110
Gln Val Arg Met Glu Ala Val Ile Glu Asp Pro Tyr Ile Leu Ile His
115           120           125
Ser Arg Lys
130

```

<210> 845

<211> 505

<212> DNA

<213> Homo sapiens

<400> 845

```

gccacctgcc caaggctgga tgacgggcct agggcacatc taaggaacaa ggacaggaca
60
gaagcaaaagc cacagctgct ggggcagggt gggggccggt atgtctggcc agcagcatca
120
ccctgtcccc cggcggggct ccaggaccgg gagactcatc agccggaagc tcttggagga
180
ggcgggtgctc gtgaagacag gcacccttgc tcttgagagg ggcacccaga gaaccaagac
240
tcagcagagg gaacacaggg ctacgcccag gccccagcc tgatatccag agtctaatac
300
ccacctcagc ccagggggga gccttgagag gagctatgct cctcatggac cccagtttcc
360
ctgtcatacg ggtccgagc cctgcactgc ctccagggtg gttcccaagg tcttttccca
420
ttactcctca cgtgagcact cagtaaacca atacacatac acaagggtga cattaattcc
480
agccacagaa tcccaggcca cgcgt
505

```

<210> 846

<211> 130

<212> FRT

<213> Homo sapiens

<400> 846

```

Met Gly Lys Asp Leu Gly Asn Tyr Pro Gly Gly Ser Ala Gly Leu Gly

```

```

1           5           10           15
Ala Arg Met Gln Arg Lys Leu Gly Ser Met Arg Asp Ile Ala Pro Leu
20
Lys Ala Pro Pro Trp Ala Glu Val Gly Phe Arg Leu Trp Ile Ser Gly
35
Leu Gly Pro Gly Arg Ser Pro Val Phe Pro Leu Leu Ser Leu Gly Ser
50
Leu Gly Ala Pro Leu Arg Ser Lys Gly Ala Cys Leu His Gly Ser Arg
65
Leu Leu Gln Glu Leu Pro Ala Asp Glu Ser Pro Gly Pro Gly Ala Pro
85
Pro Gly Ala Gly Val Met Leu Leu Ala Arg His Thr Gly Pro His Pro
100
Ala Pro Ala Ala Val Ala Leu Leu Leu Ser Cys Pro Cys Ser Leu Asp
115
Val Pro
130

```

<210> 847

<211> 448

<212> DNA

<213> Homo sapiens

<400> 847

```

aagcttttaa aggagcaaga aaacatgaaa gagctagtag tcaaccttct cgcgatgact
60
caaatcaaaa ttgatgaaaa ggaacaaaag tocaaggatt tcctgaaagc tcagcaaaaa
120
tacaccaaca ttgttaaaga aatgaaagca aaggatcttg aaatcaggat acacaagaag
180
aaaaaatgtg aaatttatcg gagactgaga gagcttgcta aactgtatga caccattcga
240
aatgaaagaa acaaatttgt taacttactc cacaaagctc atcagaaagt aaatgaaata
300
aaagaaagcg ataaaatgtc attaaatgaa cttgaaatc tgagaaatag tgccgttagt
360
caagaaagaa agctacaaaa ttccatgctg aaacacgcca acaatgttac catcagagag
420
agcatgcaaa acgatgtgcg caaaattt
448

```

<210> 848

<211> 149

<212> PRT

<213> Homo sapiens

<400> 848

```

Lys Leu Leu Lys Glu Gln Glu Asn Met Lys Glu Leu Val Val Asn Leu
1           5           10           15
Leu Arg Met Thr Gln Ile Lys Ile Asp Glu Lys Glu Gln Lys Ser Lys
20
Asp Phe Leu Lys Ala Gln Gln Lys Tyr Thr Asn Ile Val Lys Glu Met
35
Lys Ala Lys Asp Leu Glu Ile Arg Ile His Lys Lys Lys Lys Cys Glu
40

```

```

      50              55              60
Ile Tyr Arg Arg Leu Arg Glu Leu Ala Lys Leu Tyr Asp Thr Ile Arg
65              70              75              80
Asn Glu Arg Asn Lys Phe Val Asn Leu Leu His Lys Ala His Gln Lys
      85              90              95
Val Asn Glu Ile Lys Glu Arg His Lys Met Ser Leu Asn Glu Leu Glu
      100             105             110
Ile Leu Arg Asn Ser Ala Val Ser Gln Glu Arg Lys Leu Gln Asn Ser
      115             120             125
Met Leu Lys His Ala Asn Asn Val Thr Ile Arg Glu Ser Met Gln Asn
      130             135             140
Asp Val Arg Lys Ile
145

<210> 849
<211> 463
<212> DNA
<213> Homo sapiens

<400> 849
nnacgcgtga ttgttggggc caaggaatgc catgtggaga gtgcaggatga agtgataagt
60
cttttggaga tggggaatgc agccagacat acagggtacca ctcaaatgaa tgagcactcc
120
agcagatcac atgcaatttt tacaatcagc atttgtcaag ttcataaaaa tatggaggca
180
gctgaagatg gatcatggta ttccccctcg catattgtct caaagttcca ctttgtggat
240
ttggcaggat cagaaagagt aacccaaaacg gggaataactg gtgaacgggtt caaagaatcc
300
attcaaatca atagtggatt gctggcttta ggaaatgtaa taagcgctct tggggaccac
360
cgcaggaaga gttcacatat tccatatagg gatgctaaaa ttaccggct tctgaaagat
420
tctctgggag gcagtgctaa gactgtcatg atcacatgtg tca
463

<210> 850
<211> 154
<212> PRT
<213> Homo sapiens

<400> 850
Xaa Arg Val Ile Val Gly Ala Lys Glu Cys His Val Glu Ser Ala Gly
1              5              10              15
Glu Val Ile Ser Leu Leu Glu Met Gly Asn Ala Ala Arg His Thr Gly
      20              25              30
Thr Thr Gln Met Asn Glu His Ser Ser Arg Ser His Ala Ile Phe Thr
      35              40              45
Ile Ser Ile Cys Gln Val His Lys Asn Met Glu Ala Ala Glu Asp Gly
      50              55              60
Ser Trp Tyr Ser Pro Arg His Ile Val Ser Lys Phe His Phe Val Asp
65              70              75              80
Leu Ala Gly Ser Glu Arg Val Thr Lys Thr Gly Asn Thr Gly Glu Arg

```

```

      85              90              95
Phe Lys Glu Ser Ile Gln Ile Asn Ser Gly Leu Leu Ala Leu Gly Asn
      100              105              110
Val Ile Ser Ala Leu Gly Asp Pro Arg Arg Lys Ser Ser His Ile Pro
      115              120              125
Tyr Arg Asp Ala Lys Ile Thr Arg Leu Leu Lys Asp Ser Leu Gly Gly
      130              135              140
Ser Ala Lys Thr Val Met Ile Thr Cys Val
      145              150

```

<210> 851

<211> 372

<212> DNA

<213> Homo sapiens

<400> 851

```

aaatttcctg tttctgatcg acgaaataaa gtttagcgtg atgagtgagc tgcttatgca
60
gttcctccat tcgcttataa acagttttat ttctcatttc gaaaactctc gatgcagaat
120
aaaggctaga gtctggggac caagtcccca gctccgttta cgcgacttcc ttgaccttgt
180
ttgttatgct gataagggtta ttcagcttga cgatttgctc gtggtctcttc aacgcgtttg
240
cagctggctg acgatattcc tggtaggaac tacgatagaa gaccagcatc ggaagaactt
300
tgtagatgct gaacaaacac ccaccgatca cttcagcctc gaagtaaggg ttatactgtc
360
taacccacgc gt
372

```

<210> 852

<211> 110

<212> PRT

<213> Homo sapiens

<400> 852

```

Met Ser Glu Leu Leu Met Gln Phe Leu His Ser Leu Ile Asn Ser Phe
1      5      10      15
Ile Ser His Phe Glu Asn Ser Arg Cys Arg Ile Lys Ala Arg Val Trp
20      25      30
Gly Pro Ser Pro Gln Leu Arg Leu Arg Asp Phe Leu Asp Leu Val Cys
35      40      45
Tyr Ala Asp Lys Val Ile Gln Leu Asp Asp Leu Phe Val Val Phe Gln
50      55      60
Pro Phe Cys Ser Trp Ser Thr Ile Phe Leu Val Gly Thr Thr Ile Glu
65      70      75      80
Asp Gln His Arg Lys Asn Phe Val Asp Ala Glu Gln Thr Pro Thr Asp
85      90      95
His Phe Ser Leu Glu Val Arg Val Ile Leu Ser Asn Pro Arg
100      105      110

```

<210> 853

<211> 423

<212> DNA

<213> Homo sapiens

<400> 853

acgcgttcag aaacttatgg tgaatggccc gaactagaaa acctagtcga cgaatattac
 60
 caagctatgg gcatggatgt gcgtcgagaa acctgggtgc gcgagcagat actcaagaaa
 120
 gtccaagaaa cgcatttgtt agaagagctt gcaggcatag aatcaggtga tgatggcgca
 180
 gtggtggaag agagcgtatt agaaggcctc gatacctatt tatgtgagat aaaagaagca
 240
 cagattcgtc atggattgca tcgtcttgga gaattaccag aagacgataa attggccgat
 300
 accttggtgc ccttattgct tttacccctg gccagtgaca ttaccagcaa ggggaattttg
 360
 catgccttaa tggcagattt agagttagaa caagacgatt ttgacccaat gcaagcagc
 420
 cgt
 423

<210> 854

<211> 141

<212> PRT

<213> Homo sapiens

<400> 854

Thr	Arg	Ser	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Glu	Leu	Glu	Asn	Leu	Val
1				5					10					15	
Asp	Glu	Tyr	Tyr	Gln	Ala	Met	Gly	Met	Asp	Val	Arg	Arg	Glu	Thr	Trp
			20					25					30		
Leu	Arg	Glu	Gln	Ile	Leu	Lys	Lys	Val	Gln	Glu	Thr	His	Leu	Leu	Glu
		35				40					45				
Glu	Leu	Ala	Gly	Ile	Glu	Ser	Gly	Asp	Asp	Gly	Ala	Val	Val	Glu	Glu
	50					55				60					
Ser	Val	Leu	Glu	Gly	Leu	Asp	Thr	Tyr	Leu	Cys	Glu	Ile	Lys	Glu	Ala
	65				70				75				80		
Gln	Ile	Arg	His	Gly	Leu	His	Arg	Leu	Gly	Glu	Leu	Pro	Glu	Asp	Asp
			85					90					95		
Lys	Leu	Ala	Asp	Thr	Leu	Val	Ala	Leu	Leu	Arg	Leu	Pro	Arg	Gly	Ser
		100						105					110		
Asp	Ile	Thr	Ser	Lys	Gly	Ile	Leu	His	Ala	Leu	Met	Ala	Asp	Leu	Glu
		115				120							125		
Leu	Glu	Gln	Asp	Asp	Phe	Asp	Pro	Met	Gln	Ser	Thr	Arg			
	130					135						140			

<210> 855

<211> 338

<212> DNA

<213> Homo sapiens

<400> 855

acgcgtgaag ggggagctca aagtagatgg acctctgact agatggagct ctgagtaaga
 60

tgaatgtctg tgcggatgtt gctcacagca agatagtgtc tggagcgatt ggcactctga
 120
 acaagatgga gcatggagca gatggagctc tgagcaagat ggagcgtgga gtagatagag
 180
 cttggagcaa gaaggagctc caagcaagat ggagcttgca gcagggtgctt ctcatgttaa
 240
 gatggagctc agagaagatg atgctcagag taagattgag ctcggtgatt ggcactccaa
 300
 acattgtctt gagcccattg gagnctctga gcagaaaag
 338

<210> 856

<211> 93

<212> PRT

<213> Homo sapiens

<400> 856

Met	Asn	Val	Cys	Ala	Asp	Val	Ala	His	Ser	Lys	Ile	Val	Leu	Gly	Ala
1			5					10			15				
Ile	Gly	Thr	Ser	Asn	Lys	Met	Glu	His	Gly	Ala	Asp	Gly	Ala	Leu	Ser
		20					25				30				
Lys	Met	Glu	Arg	Gly	Val	Asp	Arg	Ala	Trp	Ser	Lys	Lys	Glu	Leu	Gln
		35				40					45				
Ala	Arg	Trp	Ser	Leu	Gln	Gln	Val	Leu	Leu	Ser	Val	Arg	Trp	Ser	Ser
		50				55				60					
Glu	Lys	Met	Met	Leu	Arg	Val	Arg	Leu	Ser	Ser	Val	Ile	Gly	Thr	Pro
65				70					75					80	
Asn	Ile	Ala	Leu	Ser	Pro	Leu	Glu	Xaa	Leu	Ser	Arg	Lys			
			85					90							

<210> 857

<211> 435

<212> DNA

<213> Homo sapiens

<400> 857

ccggacagtg ggccaccagt gtttgccccc agcaatcatg tcagtgaagc ccaacctcgg
 60
 gagacacccc ggccctctcat gctcctctacc aagcctttcc tagcacctga gaccaccagg
 120
 cctggtgaca ggggtggagac ccctgtgggg gagagagccc caaccctgtt ctacgcaagg
 180
 tctgaggtct cccctgagag ccaagaggac tcagagagacc cagcagagga ggacagtggc
 240
 tctgagcagc ctcccaacag cgtcctgcct gacaaaactga aggtgagctg ggagaacccc
 300
 agccccccagg aggccctctgc tgcagagagt gcagaaccgt cccaggcacc ctgttctgag
 360
 acctctgagg cgtccccccag ggagggtggg aagcccccta cccccccacc caagatcttta
 420
 tcagagaaac tgaaa
 435

<210> 858

<211> 145

<212> PRT

<213> Homo sapiens

<400> 858

```

Pro Asp Ser Gly Pro Pro Val Phe Ala Pro Ser Asn His Val Ser Glu
 1             5             10             15
Ala Gln Pro Arg Glu Thr Pro Arg Pro Leu Met Pro Pro Thr Lys Pro
      20             25             30
Phe Leu Ala Pro Glu Thr Thr Ser Pro Gly Asp Arg Val Glu Thr Pro
 35             40             45
Val Gly Glu Arg Ala Pro Thr Pro Val Ser Ala Ser Ser Glu Val Ser
 50             55             60
Pro Glu Ser Gln Glu Asp Ser Glu Thr Pro Ala Glu Glu Asp Ser Gly
 65             70             75             80
Ser Glu Gln Pro Pro Asn Ser Val Leu Pro Asp Lys Leu Lys Val Ser
      85             90             95
Trp Glu Asn Pro Ser Pro Gln Glu Ala Pro Ala Ala Glu Ser Ala Glu
      100            105            110
Pro Ser Gln Ala Pro Cys Ser Glu Thr Ser Glu Ala Ala Pro Arg Glu
      115            120            125
Gly Gly Lys Pro Pro Thr Pro Pro Pro Lys Ile Leu Ser Glu Lys Leu
      130            135            140
Lys
145

```

<210> 859

<211> 561

<212> DNA

<213> Homo sapiens

<400> 859

```

naccgctgggt gtggtaatcc ggtttctggt ggcgacggct gccacccttc ttggcaagac
60
atgccgtgtgc gtgccgatat gccatacgaa gcttggccta gtgcgaaaag ctgcctggaa
120
ccctcgaaaga ggcagggctcg gcaggttacc gtggctcggt tacgcatcgt ttgcacgatg
180
aaccctcatc tgggagcaga tatgacgacg taccagtacc tcattgtcgg tggcgggatg
240
gccgctgatt ctgccgcccg cggtatccgc gacatcgaca agaaagggtc gatcgccatc
300
ctcagcgtcg acgtcgacgc cccgtatcct cggccagcgc tgagcaagaa gctgtggact
360
gaccctgagt tcacctggga ccaggtcgac ctgtctactg tcgctgacac cggcgcgga
420
ttcggtcgctg gcactgaggt gctcagcatt gaccgtgacg gcaagaccgt cctgaccgct
480
tccggccagg tattcggtta ccagaagttg ctgctcgta cgggacctac cccgtcgccg
540
attgacgacg acggcgatgc c
561

```

<210> 860

<211> 187

<212> PRT

<213> Homo sapiens

<400> 860

```

Xaa Ala Trp Cys Gly Asn Pro Val Ser Gly Gly Asp Gly Cys His Pro
 1           5           10           15
Ser Trp Gln Asp Met Pro Leu Arg Ala Asp Met Pro Tyr Glu Ala Trp
          20           25           30
Pro Ser Ala Lys Ser Ser Leu Glu Pro Ser Lys Arg Gln Gly Arg Gln
          35           40           45
Val Thr Val Val Gly Val Arg Ile Val Ser Thr Met Asn Pro Ile Leu
          50           55           60
Gly Ala Asp Met Thr Thr Tyr Gln Tyr Leu Ile Val Gly Gly Gly Met
65           70           75           80
Ala Ala Asp Ser Ala Ala Arg Gly Ile Arg Asp Ile Asp Lys Lys Gly
          85           90           95
Ser Ile Ala Ile Leu Ser Ala Asp Val Asp Ala Pro Tyr Pro Arg Pro
          100          105          110
Ala Leu Ser Lys Lys Leu Trp Thr Asp Pro Glu Phe Thr Trp Asp Gln
          115          120          125
Val Asp Leu Ala Thr Val Ala Asp Thr Gly Ala Glu Leu Arg Leu Gly
          130          135          140
Thr Glu Val Leu Ser Ile Asp Arg Asp Gly Lys Thr Val Leu Thr Ala
145          150          155          160
Ser Gly Gln Val Phe Gly Tyr Gln Lys Leu Leu Leu Val Thr Gly Leu
          165          170          175
Thr Pro Ser Arg Ile Asp Asp Asp Gly Asp Ala
          180          185

```

<210> 861

<211> 352

<212> DNA

<213> Homo sapiens

<400> 861

```

ccatgggttt ctatgctctg aggttttcate tgtggggaac agtattgact tacttacaac
60
gagataatgg tcatacccta tgggtactca ccatagctctg gcggtacatg gactttctcg
120
ccccagtaag atctgtatcc acaggacact taaagtcacc ttacagaggg ctatcccatg
180
gcttgaggcc tattagaggg gtctcttttc agccatcagt gttagaggcc atctgcgatg
240
gatccagag cctgcctcgg gaatggcaga agctggctgg tgcttgccgt gggctttgccc
300
tgtttctactg ctttcaggga ggcctgccac agggggagaaa ctgggggggg ga
352

```

<210> 862

<211> 116

<212> PRT

<213> Homo sapiens

<400> 862

```

Met Gly Phe Tyr Ala Leu Arg Phe His Leu Trp Gly Thr Val Leu Thr
 1             5             10             15
Tyr Leu Gln Arg Asp Asn Gly His Thr Leu Trp Ser Leu Thr Ile Val
 20             25             30
Trp Arg Tyr Met Asp Phe Ser Ala Pro Val Arg Ser Val Ser Thr Gly
 35             40             45
His Leu Lys Ser Pro Tyr Arg Gly Leu Ser Gln Cys Leu Arg Pro Ile
 50             55             60
Arg Gly Val Ser Phe Gln Pro Ser Val Leu Glu Ala Ile Cys Met Gly
 65             70             75             80
Ser Gln Ser Leu Pro Arg Glu Trp Gln Lys Leu Ala Gly Ala Trp Arg
 85             90             95
Gly Leu Cys Leu Phe His Cys Phe Gln Gly Gly Leu Pro Gln Gly Arg
100             105             110
Asn Trp Gly Gly
115

```

<210> 863

<211> 327

<212> DNA

<213> Homo sapiens

<400> 863

```

tccggatcgca cccggacgaa ttccacgggtc cagccattga ctccaaatg ctctttgaca
60
tacgcgcgtga catgttcaat gtccaactta cgcattgtcca ccgctcacc ggtctcattg
120
agttttagcgt cgcagtagac gttgcggtag ttctcgttga ccgactgtc atacgagatg
180
tgcagaagca tcggtttgcg gccatcctcg gacggcattg gcttggttga catggccgct
240
tggcggaaca tggtcagggt aaagcccgac ttgaagttgt ggcacagggc agaaacacac
300
agcatttctg accggcgatg acccatn
327

```

<210> 864

<211> 108

<212> PRT

<213> Homo sapiens

<400> 864

```

Met Gly His Arg Ser Glu Met Leu Cys Val Ser Ala Leu Ser His
 1             5             10             15
Asn Phe Lys Ser Gly Phe Thr Leu Asn Met Phe Arg Gln Ala Ala Met
 20             25             30
Tyr Asn Lys Pro Met Pro Ser Glu Asp Gly Arg Lys Pro Met Leu Leu
 35             40             45
His Ile Ser Tyr Glu Gln Ser Val Asn Glu Asn Tyr Arg Asn Val Tyr
 50             55             60
Ser Gln Leu Lys Leu Asn Glu Thr Gly Glu Arg Val Asp Met Arg Lys
 65             70             75             80
Leu Asp Ile Glu His Val Thr Ala Tyr Val Lys Glu His Leu Glu Val

```

```

      85              90              95
Asn Gly Trp Thr Val Glu Phe Val Arg Val Asp Pro
      100              105

<210> 865
<211> 729
<212> DNA
<213> Homo sapiens

<400> 865
acgcgtcatc ctcattcaag aggccaggga ggagcaccac cctccgcata ttgcgcgtgc
60
agctctcgtt ctggtctctg agcatgccca cggcgctctg cacacagctt ctcagcagcc
120
tgggtggtgc caggatcgac acatcactgc ctccgagttc agaggtttcc tttccacact
180
tttcagaact ttctgtttcc atggcctcct ctgccacctc tgcacacctc cctgatgtgc
240
tggcctccgt ctccatcgcc tctcatggc cgtcttccgc cgggtgttcc aagcccagct
300
caggcaagtc tccgggcgcg aacagctggc tgatggtgac atgctgcagc ctggtcacat
360
cagaaacat gaggggtgat ctccggaggt catcgatgtg gacagactgc cacagccctc
420
cgtggaagcc cacataggct gttcctcttc ccaccggga cagttttgtg atgaaataga
480
cgaagatacg gtctctatct tctcgtatct tgttgatttc atttataaca gaatacttag
540
ctgaggcaat gagctgggag ctacggattc catcttcaaa atctgtctga aaaatgagga
600
ttttacatct ggctgtattc gttaaacagt ttccgacttc tttaggaat gactactcgg
660
tgtcaaatcg ctgcagccac aggagtgtgg gtttcggagc cctgctctgt acctctgatt
720
ctaaaattt
729

<210> 866
<211> 83
<212> PRT
<213> Homo sapiens

<400> 866
Ala Cys Pro Arg Arg Ser Ala His Ser Phe Ser Ala Ala Trp Trp Cys
1 5 10 15
Pro Gly Ser Thr His His Cys Leu Arg Val Gln Arg Phe Pro Phe Pro
20 25 30
Pro Ser Gln Asn Phe Leu Phe Pro Trp Pro Pro Leu Pro Pro Leu Pro
35 40 45
Pro Pro Leu Met Cys Trp Pro Pro Ser Pro Ser Pro Pro His Gly Arg
50 55 60
Leu Pro Pro Gly Val Pro Ser Pro Ala Gln Ala Ser Leu Arg Ala Arg
65 70 75 80
Thr Ala Gly

```

<210> 867
 <211> 640
 <212> DNA
 <213> Homo sapiens

 <400> 867
 nntccggaac atcaagatcc aggcgcagaa gaccgtcaga agctgcactg gccacctcct
 60
 tcaggtggac tctcgttggg ggcggcgctc gctggcccc tcgcaccggg tcccggtgca
 120
 catgctccag ggcgcagctc ttgtccacct ttacctcacc gaaagccttg tttttgcctc
 180
 ggtaaatccc ttcattgagg gctttgatcc aggattcctt ctctcccccg gtgggtgcct
 240
 ggaatttgat gtcgctgacc ttgttccctg gggatcgag caggataaag cggtgttttc
 300
 gcttgaggag ggcacgaagg tcctggcact tctcatagct gccagctcc acagtctcca
 360
 cacactctg atcatctca ttctcataga ccagcagctg ggcctggcag aggcagagat
 420
 atcggtcttt ccagaaaccc aggaggcccc cactgctctt cttgatccag ccagccttgg
 480
 ccaccatctg tgctccccga ggcttctcac cggcttctt cacacctcc tctccatgg
 540
 cgagtcggcc gaggtccgc cgctccgcca ctgcctcca gcgcgcgcg ggctctgcca
 600
 ccgcgtctac gcccgccag gcggcgactc tccgcgttct
 640

<210> 868
 <211> 52
 <212> PRT
 <213> Homo sapiens

<400> 868
 Gly Gly His Glu Gly Pro Gly Thr Ser His Ser Cys Pro Ala Pro Gln
 1 5 10 15
 Ser Pro His Thr Ser Asp His Pro His Ser His Arg Pro Ala Ala Gly
 20 25 30
 Pro Gly Arg Gly Ala Asp Ile Gly Leu Ser Arg Asn Pro Gly Gly Pro
 35 40 45
 His Cys Ser Ser
 50

<210> 869
 <211> 321
 <212> DNA
 <213> Homo sapiens

<400> 869
 ngggtgatgc tgctcgcggc attgagcatc tttgtgctca gcgcgctgtt tatcgacaac
 60

ttctctgtcgc cgctgaatat gcgcgggctg ggcctggcga tttcgacggt gggcatcgct
 120
 gcgtgcacca tgctgttctg cctggcgctg gggcatttcg acttgctcgtt gggctcgggt
 180
 atcgctgtg cggtgtggt cgcggggatt gtgattcgtg acaccgatag cgtggcactc
 240
 ggcgtgtccg ctgcgttggc catgggcctg gtagtggggc tgatcaacgg catcgtgatc
 300
 gccaaagctgc gcatcaacgc g
 321

<210> 870
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 870
 Xaa Val Met Leu Leu Ala Ala Leu Ser Ile Phe Val Leu Ser Ala Leu
 1 5 10 15
 Phe Ile Asp Asn Phe Leu Ser Pro Leu Asn Met Arg Gly Leu Gly Leu
 20 25 30
 Ala Ile Ser Thr Val Gly Ile Ala Ala Cys Thr Met Leu Phe Cys Leu
 35 40 45
 Ala Ser Gly His Phe Asp Leu Ser Val Gly Ser Val Ile Ala Cys Ala
 50 55 60
 Gly Val Val Ala Gly Ile Val Ile Arg Asp Thr Asp Ser Val Ala Leu
 65 70 75 80
 Gly Val Ser Ala Ala Leu Ala Met Gly Leu Val Val Gly Leu Ile Asn
 85 90 95
 Gly Ile Val Ile Ala Lys Leu Arg Ile Asn Ala
 100 105

<210> 871
 <211> 320
 <212> DNA
 <213> Homo sapiens

<400> 871
 agatcttcag agtcctcgtc ttttaaatgg gggtaacagc agcaagtcct cagaggtggt
 60
 ctgagccctca aaacacatcc tggtttgttaa cgtccgcagc ctccagcagg gctaggcaca
 120
 gaacaagcat tcaggacctg gaagggtacca gcgacacctg gtccctccctt cccaggcaca
 180
 aggcagcccc tctccattca agctctgccc cagcccgagc aagagagggg tcctcagcca
 240
 ctgccccccac cactaccaca atcataactca cctctccttg tccatacgtg acaaaaggacc
 300
 tgccaaggcc agggagagcaa
 320

<210> 872
 <211> 98
 <212> PRT

<213> Homo sapiens

<400> 872

```

Met Gly Val Thr Ala Ala Ser Pro Gln Arg Cys Pro Glu Pro Gln Asn
 1             5             10             15
Thr Ser Trp Phe Val Thr Ser Ala Ala Ser Ala Gly Ala Arg His Arg
 20             25             30
Thr Ser Ile Gln Asp Leu Glu Gly Thr Ser Asp Thr Trp Ser Ser Leu
 35             40             45
Pro Arg His Lys Ala Ala Pro Leu His Ser Ser Ser Ala Pro Ala Gln
 50             55             60
Gln Arg Glu Gly Ser Ser Ala Thr Ala Pro Thr Thr Thr Thr Ile Ile
 65             70             75             80
Leu Thr Ser Pro Gly Pro Tyr Val Thr Lys Asp Leu Pro Arg Pro Gly
 85             90             95
Arg Gln

```

<210> 873

<211> 363

<212> DNA

<213> Homo sapiens

<400> 873

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ntgttttagc atcggttttt acgggtgtat cagcgcggttt agcagcggttt ttagcgggatg
60
catcagcatg ttttgcgtca cgttttataa ctgtgctacc gtgttttagca tcatttttga
120
cggaggtatc aatacgttta gcatcggttt taacagatgt atcaacacgg gggttcacccg
180
ctttagcaga atccccagct ctatgtagcca ctttagatac ttcagatttt atagagatcg
240
cagttgtttc agcgtgagcc atgctgaatg tagaaccaag ggccaatgta attgctaaag
300
acaaagataa tttatttagt ttcattgttc gagagaagtg tgcgaattcg gcgatacagt
360
cag
363

```

<210> 874

<211> 108

<212> PRT

<213> Homo sapiens

<400> 874

```

Met Lys Leu Asn Lys Leu Ser Leu Ser Leu Ala Ile Thr Leu Ala Leu
 1             5             10             15
Gly Ser Thr Phe Ser Met Ala His Ala Glu Thr Thr Ala Thr His Ile
 20             25             30
Lys Ser Glu Val Ser Lys Val Ala Thr Arg Ala Gly Asp Ser Ala Lys
 35             40             45
Ala Asp Glu Pro Arg Val Asp Thr Ser Val Lys Asn Asp Ala Lys Arg
 50             55             60
Ile Asp Thr Ser Val Lys Asn Asp Ala Lys His Gly Ser Thr Val Val

```

```

65          70          75          80
Lys Arg Asp Ala Lys His Ala Asp Ala Ser Ala Lys Asn Ala Ala Lys
      85          90          95
Arg Ala Asp Thr Pro Val Lys Asn Asp Ala Lys Gln
      100          105

<210> 875
<211> 355
<212> DNA
<213> Homo sapiens

<400> 875
acgcgtgaag gggaccctaa ctogtctggg ctgtaggatg cgggcgaggc ttccacaaac
60
tcactgtctg ggggagaaga aaagcagaaa acaactcgaa tcgctaccat tcaggacgaa
120
ccgcgaagc accagctcaa gcgcaggtcc ccgggaaaaa gcgcgggctt ctctctccca
180
gcgtcagaa tccctgagcc ggaggccccg cgggattcag acgcagat ccccgaggag
240
tgacaaatcg ccgcagaaac ttgggggaca actcgccctt ggcaccgcgc gggttcacgg
300
cgcggcgagg cgcgcccaa ctttccccgc gtgccacccc gcggctcccc cggen
355

<210> 876
<211> 106
<212> PRT
<213> Homo sapiens

<400> 876
Met Arg Ala Arg Leu Pro Gln Thr His Cys Leu Gly Glu Lys Lys Ser
1          5          10          15
Arg Lys Gln Leu Glu Ser Leu Pro Phe Arg Thr Asn Pro Pro Ser Thr
20          25          30
Ser Ser Ser Ala Gly Pro Arg Glu Lys Ala Arg Ala Ser Leu Ser Gln
35          40          45
Arg Ser Glu Ser Leu Ser Arg Arg Pro Arg Gly Ile Gln Thr Ala Arg
50          55          60
Ser Pro Gly Ser Asp Lys Ser Pro Gln Lys Leu Gly Gly Gln Leu Gly
65          70          75          80
Pro Gly Thr Ala Arg Leu Pro Gly Ala Gly Arg Arg Ala Pro Thr Phe
85          90          95
Pro Ala Cys His Pro Ala Ala Pro Pro Ala
100          105

<210> 877
<211> 487
<212> DNA
<213> Homo sapiens

<400> 877
acgcgtactt tgggtaatga actgacgacc gctgagatcg actgccttta tctgtgttac
60

```

caatccacct atgctaaacg tggtcagcaa gggtatctca cacgagaatt ctttggtttg
 120
 ttggccaata ccatgggaga tcaaatcett ttagtacagg cgtacagaga aggcgaagcg
 180
 atgcgcgcgt cgtgggtgtt ctttgatgat cattcactat atgggcgtta ttggggcgtg
 240
 atggaagaag tggattgcct gcattttgaa gcttgttatt accaaggaat cgagttttgt
 300
 ctgaaaaaag ggttacagca ttctgatccg ggtacacaag gggaacacaa gattgcgcgc
 360
 ggctttgaac ctgttttttag ccacagcgtg cattacattg ctcatcaagg ttttctgtgaa
 420
 gcgattggga atttctgtga ggaagaagcg caagctgtgc gcgagtatca tcaagatacc
 480
 cacgcgt
 487

<210> 878

<211> 162

<212> PRT

<213> Homo sapiens

<400> 878

Thr	Arg	Thr	Leu	Gly	Asn	Glu	Leu	Thr	Thr	Ala	Glu	Ile	Asp	Cys	Leu
1			5						10					15	
Tyr	Leu	Cys	Tyr	Gln	Ser	Thr	Tyr	Ala	Lys	Arg	Gly	Gln	Gln	Gly	Tyr
			20					25			30				
Leu	Thr	Arg	Glu	Phe	Phe	Gly	Leu	Leu	Ala	Asn	Thr	Met	Gly	Asp	Gln
			35			40					45				
Ile	Leu	Leu	Val	Gln	Ala	Tyr	Arg	Glu	Gly	Glu	Ala	Ile	Ala	Ala	Ser
	50					55					60				
Trp	Cys	Phe	Phe	Asp	Asp	His	Ser	Leu	Tyr	Gly	Arg	Tyr	Trp	Gly	Cys
	65				70					75				80	
Met	Glu	Glu	Val	Asp	Cys	Leu	His	Phe	Glu	Ala	Cys	Tyr	Tyr	Gln	Gly
			85					90						95	
Ile	Glu	Phe	Cys	Leu	Glu	Lys	Gly	Leu	Gln	His	Phe	Asp	Pro	Gly	Thr
			100					105						110	
Gln	Gly	Glu	His	Lys	Ile	Ala	Arg	Gly	Phe	Glu	Pro	Val	Phe	Ser	His
			115				120				125				
Ser	Val	His	Tyr	Ile	Ala	His	Gln	Gly	Phe	Arg	Glu	Ala	Ile	Gly	Asn
			130				135				140				
Phe	Cys	Glu	Glu	Glu	Ala	Gln	Ala	Val	Arg	Glu	Tyr	His	Gln	Asp	Thr
					150					155				160	
His	Ala														

<210> 879

<211> 993

<212> DNA

<213> Homo sapiens

<400> 879

ncttagcat ttaagccaac gaggcagcta atgtcctctg aacagcaaag gaaattcagc
 60

agccagtcga gtagggctct gacccctcct tcctacagta ctgctaaaaa ttcattggga
 120
 tcaagatcca gtgaatcctt tgggaagta acatcgccag taatgagtga gcatggggag
 180
 gagcacaggc agctcctctc tcaccaaatg caaggccctg gactccgtgc agctacctca
 240
 tccaaccact ctgtggacga gcaactgaag aatactgaca cgcacctcat cgacctggta
 300
 accaatgaga ttatcaccca aggacctcca gtggactgga atgacattgc tgggtctcgac
 360
 ctgggtgaagg ctgtcattaa agaggagggt ttatggccag tgttgaggtc agacgcgttc
 420
 agtggactga cggccttacc tcggagcacc cttttatttg gacctcgggg gacaggcaaa
 480
 acattattgg cgactgcat cgctagtacg ctgggggcca ctttttcaa aattgccggt
 540
 tctggactag tcgccaaggg gttaggagaa gcagagaaaa ttatccatgc ctcttttctt
 600
 gtggccaggt gtcgccagcc ctccgtgatt ttgttagtgc acattgacat gcttctctcc
 660
 tctcaagtga atgaggaaca tagtccagtc agtcggatga gaaccgaatt tctgatgcaa
 720
 ctggacactg tactaacttc ggctgaggac caaatcgtag taatttgtgc caccagtaaa
 780
 ccagaagaaa tagatgaatc ctttcggagg tacttcatga aacgactttt aatcccactt
 840
 cctgacagca cagcaggcca ccagataata gtacaactgc tctcacagca caattactgt
 900
 ctcaatgaca aggagtttgc actgctcgtc cagcgacagc aaggcttttc tggactagat
 960
 gtggctcatt tgtgtcagga agcagtgggt ggc
 993

<210> 880

<211> 331

<212> PRT

<213> Homo sapiens

<400> 880

Xaa	Leu	Ala	Phe	Lys	Pro	Thr	Arg	Gln	Leu	Met	Ser	Ser	Glu	Gln	Gln
1				5					10				15		
Arg	Lys	Phe	Ser	Ser	Gln	Ser	Ser	Arg	Ala	Leu	Thr	Pro	Pro	Ser	Tyr
			20					25				30			
Ser	Thr	Ala	Lys	Asn	Ser	Leu	Gly	Ser	Arg	Ser	Ser	Glu	Ser	Phe	Gly
			35				40					45			
Lys	Tyr	Thr	Ser	Pro	Val	Met	Ser	Glu	His	Gly	Asp	Glu	His	Arg	Gln
			50			55				60					
Leu	Leu	Ser	His	Pro	Met	Gln	Gly	Pro	Gly	Leu	Arg	Ala	Ala	Thr	Ser
65				70						75				80	
Ser	Asn	His	Ser	Val	Asp	Glu	Gln	Leu	Lys	Asn	Thr	Asp	Thr	His	Leu
			85							90				95	
Ile	Asp	Leu	Val	Thr	Asn	Glu	Ile	Ile	Thr	Gln	Gly	Pro	Pro	Val	Asp
			100				105					110			
Trp	Asn	Asp	Ile	Ala	Gly	Leu	Asp	Leu	Val	Lys	Ala	Val	Ile	Lys	Glu

```

      115              120              125
Glu Val Leu Trp Pro Val Leu Arg Ser Asp Ala Phe Ser Gly Leu Thr
      130              135              140
Ala Leu Pro Arg Ser Ile Leu Leu Phe Gly Pro Arg Gly Thr Gly Lys
      145              150              155              160
Thr Leu Leu Gly Arg Cys Ile Ala Ser Gln Leu Gly Ala Thr Phe Phe
      165              170              175
Lys Ile Ala Gly Ser Gly Leu Val Ala Lys Gly Leu Gly Glu Ala Glu
      180              185              190
Lys Ile Ile His Ala Ser Phe Leu Val Ala Arg Cys Arg Gln Pro Ser
      195              200              205
Val Ile Phe Val Ser Asp Ile Asp Met Leu Leu Ser Ser Gln Val Asn
      210              215              220
Glu Glu His Ser Pro Val Ser Arg Met Arg Thr Glu Phe Leu Met Gln
      225              230              235              240
Leu Asp Thr Val Leu Thr Ser Ala Glu Asp Gln Ile Val Val Ile Cys
      245              250              255
Ala Thr Ser Lys Pro Glu Glu Ile Asp Glu Ser Leu Arg Arg Tyr Phe
      260              265              270
Met Lys Arg Leu Leu Ile Pro Leu Pro Asp Ser Thr Ala Arg His Gln
      275              280              285
Ile Ile Val Gln Leu Leu Ser Gln His Asn Tyr Cys Leu Asn Asp Lys
      290              295              300
Glu Phe Ala Leu Leu Val Gln Arg Thr Glu Gly Phe Ser Gly Leu Asp
      305              310              315              320
Val Ala His Leu Cys Gln Glu Ala Val Val Gly
      325              330

```

<210> 881

<211> 313

<212> DNA

<213> Homo sapiens

<400> 881

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cgctgagcgc togacaatgc tccaggaacc ggtgtgtatg aggccgggga ttctaccggt
60
cgtgttttgc agggcatgcg tgagcgcgcc cgtatccatg gcggcaccgc gcgctggggc
120
gactcgcagt attatgaagg cggtttcaac gtcacggtgg agattccaac atgagcgccc
180
aaaggatgaa catggacacg acgcgcccc acaacggctcg gggcttgcg acgatcagcc
240
ggctgggtgc gcaccggttt tgccatggtg ctggattcgc aggacgacat cacggtggcc
300
tggcaagccg acn
313

```

<210> 882

<211> 57

<212> PRT

<213> Homo sapiens

<400> 882

```

Arg Val Ser Val Asp Asn Ala Pro Gly Thr Gly Val Tyr Glu Ala Gly

```

```

      1           5           10           15
Asp Ser Thr Gly Arg Gly Leu Gln Gly Met Arg Glu Arg Ala Arg Ile
      20           25           30
His Gly Gly Thr Ala Arg Trp Gly Asp Ser Gln Tyr Glu Gly Gly
      35           40           45
Phe Asn Val Thr Val Glu Ile Pro Thr
      50           55

```

<210> 883

<211> 576

<212> DNA

<213> Homo sapiens

<400> 883

```

naattaagat ctgggggtccc agtgtcattg gtgaaggcct tgggattcga ggcagctgag
60
tcctcactga ccaaggcaag ccattgcttct gactgcttga ggcaccggaa atgaacaaat
120
ggaaaacact cccattctttt tcaagcctac ctttttagcag aagaggcaga tacacaagcc
180
ctaaagatgt aacatcaggc tgagtggagg aaggctgaga agaaaaataa agcaggtcta
240
ggaggagaga gtgatgtcag gatgcccttg tgcttactcc agcctccttg tgaanaaccca
300
gctctctctg ctcccagtg agacttggat ggcagccatc aggggaaggct ggggtccagc
360
tggggagtatg ggtgtgagct ctatagacca tccctctctg caatcaataa acacttgctt
420
gtgaaagagg cccaagccac catccgcatg gacaccagtg caagtggccc caccgcctg
480
gtctctcagtg actgtgccac cagccatggg agcctgcgca tccaactgct gcataagctc
540
tccttctctg tgaacgcctt agctaagcag gtcattg
576

```

<210> 884

<211> 105

<212> PRT

<213> Homo sapiens

<400> 884

```

Met Pro Leu Cys Leu Leu Gln Pro Pro Cys Glu Asn Pro Ala Leu Leu
1           5           10           15
Ser Pro Ser Glu Asp Leu Asp Gly Ser His Gln Gly Arg Leu Gly Pro
      20           25           30
Ser Trp Glu Tyr Gly Cys Glu Leu Tyr Arg Pro Ser Leu Ser Ala Ile
      35           40           45
Asn Lys His Leu Pro Val Lys Glu Ala Gln Ala Thr Ile Arg Met Asp
      50           55           60
Thr Ser Ala Ser Gly Pro Thr Arg Leu Val Leu Ser Asp Cys Ala Thr
      65           70           75           80
Ser His Gly Ser Leu Arg Ile Gln Leu Leu His Lys Leu Ser Phe Leu
      85           90           95
Val Asn Ala Leu Ala Lys Gln Val Met

```

100

105

<210> 885
 <211> 370
 <212> DNA
 <213> Homo sapiens

<400> 885
 actagtggcg cccctcatccg ggccgctgtc ccgctctcgg agtcgggtgc gttggagtc
 50
 ggtgaggcga tgcctgacgaa cgacacaccg gtgacttggg atggcgggaa agtacggggc
 120
 aggcgggtgt cgcgcctcgg tgcgacgag ttgtcgtcga ccccggtccg cccagatccg
 180
 gtacgggctc gccacgtggc gctggaagca gtgaggtctg ggggacttga cgtagcgagc
 240
 ctgacgaaga acgggtaatc ttgcgacgc cgtcttgccc tggcccatcg ggtggttgg
 300
 gatccctggc ccgatgtcag cgatgaggct ctgctagcct gcgccgagga gtggcttgac
 360
 ctgcgacgct
 370

<210> 886
 <211> 123
 <212> PRT
 <213> Homo sapiens

<400> 886
 Thr Ser Gly Ala Leu Ile Arg Ala Ala Val Pro Leu Ser Glu Ser Ala
 1 5 10 15
 Ala Leu Glu Ser Gly Glu Ala Met Leu Thr Asn Asp Thr Pro Val Thr
 20 25 30
 Trp Asp Gly Gly Lys Val Arg Gly Arg Arg Val Ser Arg Leu Gly Ala
 35 40 45
 Ile Glu Leu Ser Ser Thr Pro Val Arg Pro Asp Pro Val Arg Ala Arg
 50 55 60
 His Val Ala Leu Glu Ala Val Arg Ser Gly Gly Leu Asp Val Ala Ser
 65 70 75 80
 Leu Thr Lys Asn Gly Glu Ser Leu Arg Arg Arg Leu Ala Leu Ala His
 85 90 95
 Arg Val Phe Gly Asp Pro Trp Pro Asp Val Ser Asp Glu Ala Leu Leu
 100 105 110
 Ala Cys Ala Glu Glu Trp Leu Asp Leu Asp Ala
 115 120

<210> 887
 <211> 447
 <212> DNA
 <213> Homo sapiens

<400> 887
 cagggcgctg cgctcggtcg cgtgctgccg atggctatgc tcggaggctt aaccgccatc
 60

attatctccg gctgcctgaa ccagcttggt aaacgctatc cgcattctgac cggcgaaggc
 120
 caactgatgc caaacctgac taatgctgat accacggctt cccaaccggc gttctcgggt
 180
 aaagcggacg tgaccacatc tgcctccggc gcgttgctgg ccgtgctgct ttacatgggtg
 240
 ggtaggttgg ttcacaagtt gattggcctg cctgctccgg ttggcatggt gttttggggc
 300
 gtgctgtgca aactgtgcaa cggcgcttct ccccgctgac tcgaaggctc gcagggtggt
 360
 tacaaaattct tccagacctc cgtcacctat ccgattctgt tcgccgttgg cgtggcgatt
 420
 acgccgtggc aggaactggt caacgcg
 447

<210> 888

<211> 149

<212> PRT

<213> Homo sapiens

<400> 888

Gln Gly Val Ala Leu Gly Arg Val Leu Pro Met Val Met Leu Gly Gly
 1 5 10 15
 Leu Thr Ala Ile Ile Ile Ser Gly Cys Leu Asn Gln Leu Gly Lys Arg
 20 25 30
 Tyr Pro His Leu Thr Gly Glu Gly Gln Leu Met Pro Asn Arg Ala Asn
 35 40 45
 Ala Asp Thr Thr Ala Ser Gln Pro Ala Phe Ser Gly Lys Ala Asp Val
 50 55 60
 Thr Thr Ile Ala Ser Gly Ala Leu Leu Ala Val Leu Leu Tyr Met Val
 65 70 75 80
 Gly Arg Leu Val His Lys Leu Ile Gly Leu Pro Ala Pro Val Gly Met
 85 90 95
 Leu Phe Val Ala Val Leu Val Lys Leu Cys Asn Gly Ala Ser Pro Arg
 100 105 110
 Leu Leu Glu Gly Ser Gln Val Val Tyr Lys Phe Phe Gln Thr Ser Val
 115 120 125
 Thr Tyr Pro Ile Leu Phe Ala Val Gly Val Ala Ile Thr Pro Trp Gln
 130 135 140
 Glu Leu Val Asn Ala
 145

<210> 889

<211> 450

<212> DNA

<213> Homo sapiens

<400> 889

ggtaccaccc cacacctgac aagaggtggc cagggaggaa gggaggggtc ttacctcccc
 60
 attctccctc agtaaaattc aggatgccca gtgaagtttg aatgtcagat aaacaatttg
 120
 ttagtataag gatgtaccta gcattgaaat gatgccttgg aatttactaa atctgcgaact
 180

atgcagcctt atttcatggc gggcagtggc ggtgatccca ggtttcaggg gcggggaagg
 240
 gtgctgggga gatcctgagg tcaggaaacc gtacacctet gcttctgccc tctcttccct
 300
 gtgccggcca caaggcaatg actcctgtgt gggtcgagag gcagaaatgg gtctggaagg
 360
 ggattcccag tgtctggcaa gttctggtaa attctgcatt ggaggttctc tctgtagtaa
 420
 gggggagtgg cctggccgcc cttcacgcgt
 450

<210> 890
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 890
 Met Met Pro Cys Asn Leu Leu Asn Leu Gln Leu Cys Ser Leu Ile Ser
 1 5 10 15
 Trp Arg Ala Val Ala Val Ile Pro Gly Phe Arg Gly Gly Glu Gly Cys
 20 25 30
 Trp Gly Asp Pro Glu Val Arg Asn Pro Tyr Thr Ser Ala Ser Ala Leu
 35 40 45
 Ser Ser Leu Cys Arg Pro Gln Gly Asn Asp Ser Cys Val Gly Ala Glu
 50 55 60
 Ala Glu Met Gly Leu Glu Gly Asp Ser Gln Cys Leu Ala Ser Ser Gly
 65 70 75 80
 Lys Phe Cys Ile Gly Gly Ser Leu Cys Ser Lys Gly Ser Trp Pro Gly
 85 90 95
 Arg Pro Ser Arg
 100

<210> 891
 <211> 318
 <212> DNA
 <213> Homo sapiens

<400> 891
 mncaccgtcc ccgtactgga tcgcgcgag gatttcgccg actgcatgca cattgacgta
 60
 ctggatccct tccacactga caacaccagt gagcacagt acctggccac agatggccag
 120
 actaaggccc cggctgatag cgggactggc acccactctg agcagggaaa ctccgacata
 180
 tctagccccc tcagctctag tgacgtctgt aacaccacgc acagcaactgc tggcaatacc
 240
 ggtgaaggta ctgcgcgcaa tatgcctggg gacatggctc attcttcgac ggctaccac
 300
 ccctatgcaa gcaccggt
 318

<210> 892
 <211> 106
 <212> PRT

<213> Homo sapiens

<400> 892

```

Xaa Thr Val Pro Val Leu Asp Pro Arg Glu Asp Phe Ala Asp Cys Met
 1           5           10           15
His Ile Asp Val Leu Asp Pro Phe His Thr Asp Asn Thr Ser Glu His
      20           25           30
Ser Asp Leu Ala Thr Asp Gly Gln Thr Asn Gly Pro Ala Asp Ser Gly
      35           40           45
Thr Gly Thr His Ser Glu Gln Gly Asn Ser Asp Ile Ser Ser Pro Val
      50           55           60
Ser Ser Ser Asp Ala Ala Asn Thr Thr Asp Ser Thr Ala Gly Asn Thr
      65           70           75           80
Gly Glu Gly Thr Ala Ala Asn Met Pro Gly Asp Met Ala His Ser Ser
      85           90           95
Thr Ala Thr His Pro Tyr Ala Ser Thr Gly
      100           105

```

<210> 893

<211> 510

<212> DNA

<213> Homo sapiens

<400> 893

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<210> 894

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<212> PRT

<213> Homo sapiens

<400> 894

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Tyr	Pro	Ser	Leu	Gln	Gln	Lys
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Cys	Asp	Glu	Cys	Gly	Lys	Ser
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<211> 1119

<212> DNA

<213> Homo sapiens

<400> 895

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<211> 384

<212> DNA

<213> Homo sapiens

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35 40 45
Gln Arg Asp Thr Tyr Tyr Lys Arg Leu Glu Phe Glu Cys Gly Thr Ile
50 55 60
Thr Lys Met Gly Phe Pro Gly Tyr Phe Leu Ile Val Ala Asp Phe Ile
65 70 75 80
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<211> 734

<212> PRT

<213> Homo sapiens

<400> 900

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	100						105					110			
Asn	Ile	Ser	Ile	Phe	Pro	Glu	Ile	Leu	Gln	Leu	Pro	Gln	Ile	Gln	Phe
	115					120					125				
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Arg Lys Leu Gly Met Ala Gly Gln Lys Leu Gly Ser Ser Ala Leu Leu
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<210> 901

<211> 309

<212> DNA

<213> Homo sapiens

<400> 901

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tggaagtag tgatggacac ttatggagtt ttcagagact tatgcattgg gtaacaaggc
180
actgcaagag accccagata gcacagcatc atctcacatt tacaccacat cacatcaaca
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tcgatgctag gaggtctaaa gctgatgccca ctttcagagc tgcaagtatc caaaagactc
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cactcatga
309

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<210> 902

<211> 102

<212> PRT

<213> Homo sapiens

<400> 902

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Met Ile His Leu Pro Arg Pro Pro Lys Val Leu Gly Leu His Thr Asp
1          5          10          15
Gly Lys Leu His Phe Leu Phe Leu Leu Met Gln Gln Gly His Pro Lys
20          25          30
Ile Arg Leu Pro Ser Val Ser Val Val Ser Ser Asp Gly His Leu Trp
35          40          45
Ser Phe Gln Arg Leu Met His Trp Val Thr Arg His Cys Lys Arg Pro
50          55          60
Gln Ile Ala Gln His His Leu Thr Phe Thr Pro His His Ile Asn Ile
65          70          75          80
Asp Ala Arg Arg Ser Lys Ala Asp Ala Thr Phe Arg Ala Ala Ser Ile
85          90          95
Gln Lys Thr Pro Leu Met
100

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<210> 903
 <211> 349
 <212> DNA
 <213> Homo sapiens

<400> 903
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 taagggtctt gatggcctca tgggttgaca ggaacagaag acaaagacta gggcccaccc
 120
 aaggtgtgaa gtctaataagg aaaccttttc tccataaggc tacaatgggt ctacaaaaaa
 180
 taaaaccatg cccccccagg gactgcagcc caattttata tcaccatgag gtccaaaaaa
 240
 ttccaagctg tgaatttagt ttcaaatggc cttggtctcc agtatcccta gccatgtggc
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 aaaaacaac aattctcttt ggaggatata tctttatctt aagacttgn
 349

<210> 904
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 904
 Met Glu Ala Thr Leu Ala Leu Arg Ala Leu Met Ala Ser Trp Val Asp
 1 5 10 15
 Arg Asn Arg Arg Gln Arg Leu Gly Pro Thr Gln Gly Val Lys Ser Asn
 20 25 30
 Arg Lys Pro Phe Leu His Lys Ala Thr Met Gly Leu Pro Lys Ile Lys
 35 40 45
 Pro Cys His Pro Arg Asp Cys Ser Pro Ile Leu Tyr His His Glu Val
 50 55 60
 Gln Lys Ile Pro Ser Cys Glu Phe Ser Phe Lys Trp Pro Trp Ser Pro
 65 70 75 80
 Val Ser Leu Ala Met Trp Gln Lys Gln Thr Ile Leu Phe Gly Gly Tyr
 85 90 95
 Ile Phe Ile Leu Arg Leu
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<210> 905
 <211> 377
 <212> DNA
 <213> Homo sapiens

<400> 905
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 ctcaacgaag acatcattat cgcgggtgac cgggcagacg cgggtgattag cgtatcccag
 120
 gggctctgcg acaggctggc tggacatggc gtgacctcaa cgggtggtcc caacatcggt
 180
 gacgtcagc tggttgaccg tcctgatcga cgacatgagg ggaacatcgt cgtcacgctc
 240

gccaccctca acccgggaaa gggcatgatt gagttagctc aggctgttga gcgtcttccc
 300
 gaggttcagt tgagaatcat cggagatgga cgcgacggc accaactgga ggccattgcc
 360
 gctgataatc cacgcgt
 377

<210> 906
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 906
 Xaa Pro Glu Pro Val Val Trp Thr Glu His Asp Ser His Leu Ala His
 1 5 10 15
 Pro Asp Gln Arg Leu Asn Glu Asp Ile Ile Ala Gly Asp Arg Ala
 20 25 30
 Asp Ala Val Ile Ser Val Ser Gln Gly Leu Cys Asp Arg Leu Ala Gly
 35 40 45
 His Gly Val Thr Ser Thr Val Val Pro Asn Ile Val Asp Val Glu Leu
 50 55 60
 Phe Asp Arg Pro Asp Arg Arg His Glu Gly Thr Ile Val Val Ser Val
 65 70 75 80
 Ala Thr Leu Asn Pro Gly Lys Gly Met Ile Glu Leu Ala Gln Ala Val
 85 90 95
 Glu Arg Leu Pro Glu Val Gln Leu Arg Ile Ile Gly Asp Gly Pro Gln
 100 105 110
 Arg His Gln Leu Glu Ala Ile Ala Ala Asp Asn Pro Arg
 115 120 125

<210> 907
 <211> 332
 <212> DNA
 <213> Homo sapiens

<400> 907
 acgcgtagga tgatgaagtc cgtcactgga tcgttcttgg gtggcaaccg ggaagtcggg
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 gaccagtctc tcaacggcga gggtcaactg aaccttgctgc cgcagggtac attcccgag
 120
 cgcattcgtg ccggcgctgc tggatttgca gcattcttca cgctactgg ctatggtaca
 180
 gccgtgcaga agggtagctc tgttcttaag tatgaaaaga aggacggtaa ggctgtgcc
 240
 gtcatgacgt ccaagccgcg tgaagtgcgc tcgtttgacg gccgtgacta tataatagaa
 300
 gaggttatta aggatgaata ggatatgggt aa
 332

<210> 908
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 908
 Thr Arg Arg Met Met Lys Ser Val Thr Gly Ser Phe Leu Gly Gly Asn
 1 5 10 15
 Arg Glu Val Gly Asp Gln Phe Phe Asn Gly Glu Val Gln Leu Asn Leu
 20 25 30
 Val Pro Gln Gly Thr Phe Ala Glu Arg Ile Arg Ala Gly Ala Ala Gly
 35 40 45
 Ile Ala Ala Phe Phe Thr Pro Thr Gly Tyr Gly Thr Ala Val Gln Lys
 50 55 60
 Gly Glu Leu Val Leu Lys Tyr Glu Lys Lys Asp Gly Lys Ala Val Pro
 65 70 75 80
 Val Met Thr Ser Lys Pro Arg Glu Val Arg Ser Phe Asp Gly Arg Asp
 85 90 95
 Tyr Ile Ile Glu Glu Val Ile Lys Asp Glu
 100 105

<210> 909
 <211> 318
 <212> DNA
 <213> Homo sapiens

<400> 909
 acgcgtcggg catggcagct gtacagatct atcgcgtcag cagggcctac gcacacatga
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 tgcgcgaggg gcaccgacgc tgcgcgccatc aaaagagccg cctcgcgccc gcagcgccctc
 120
 ccaggggacgg cgactcacgt ggctcgacac gcgcgcgcga gtcgcgtggg tgtgtcacgc
 180
 cccttttttt ccaccccaa caccgaaccg gcgggccatg gctgaggatt cgcaccccat
 240
 tcgctcgggc ttgcgcacgc tcaagcgctc ctggagctcg aatgagaatg taccgcgcgc
 300
 acaaaagctcg ccgcccgc
 318

<210> 910
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 910
 Met Ala Ala Val Gln Ile Tyr Arg Val Ser Arg Ala Tyr Ala His Met
 1 5 10 15
 Met Pro Gln Gly His Arg Arg Cys Arg His Gln Lys Ser Arg Leu Ala
 20 25 30
 Pro Ala Ala Pro Pro Arg Asp Gly Asp Ser Arg Gly Ser Thr Arg Ala
 35 40 45
 Arg Glu Ser Arg Gly Cys Val Thr Pro Leu Phe Phe Pro Pro Gln His
 50 55 60
 Arg Thr Gly Gly Pro Trp Leu Arg Ile Arg Thr Pro Phe Ala Pro Ala
 65 70 75 80
 Cys Ala Cys Ser Ser Ala Pro Gly Ala Arg Met Arg Met Tyr Arg Arg
 85 90 95
 His Lys Ala Arg Arg Arg

100

<210> 911
 <211> 506
 <212> DNA
 <213> Homo sapiens

<400> 911
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 caaccttatg aggctggcct tgggggaacc ctgttttagg gatgagctga acttaccggg
 120
 aggcctgcag cgaggttggt gtgaaatgca tatctggcct ttagctggt cggtcacct
 180
 ctgggggttg caccggggcg ggggttctgc catggtctaga atgcgctaag ggggtgaaac
 240
 gaagcctgct gggcccgga accacagagc agcctggcct ttgaaggaga cctctgggca
 300
 cccctgccc accccaagt ccagccattt cacttccctg gagatggtgc aaagcaagaa
 360
 aaaaaaaaa atccagtgtt ctccaggtcag cctccacca gccaggattc atcgtctgat
 420
 ctgtttgggg agagagcatg gagggttga gatgggttg gcccagtggt tttctgatta
 480
 actcgagtt cactgaaac attttg
 506

<210> 912
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 912
 Met Phe Gln Val Asn Cys Glu Leu Ile Arg Lys His Trp Gly Pro Thr
 1 5 10 15
 His Leu His His Ser Met Leu Ser Pro Gln Thr Asp Gln Thr Met Asn
 20 25 30
 Pro Gly Trp Trp Lys Ala Asp Leu Arg Thr Leu Asp Phe Phe Phe
 35 40 45
 Leu Ala Leu His His Leu Gln Gly Ser Glu Met Ala Gly Leu Gly Gly
 50 55 60
 Gly Gln Gly Val Pro Gln Gly Leu Leu Gln Arg Pro Gly Cys Ser Val
 65 70 75 80
 Val Pro Gly Pro Ser Arg Leu Arg Phe His Pro Leu Ala His Ser Ser
 85 90 95
 His Gly Arg Thr Pro Ala Pro Val Pro Thr Pro Glu Val Ser Arg Pro
 100 105 110
 Ala Thr Lys Pro Asp Met His Phe Thr Pro Thr Ser His Ala Ala Ser
 115 120 125
 Arg

<210> 913
 <211> 339

<212> DNA

<213> Homo sapiens

<400> 913

cgcttcacg cgtgggttcag gcgtacgggt ccggtactg gtgactaccg tggcacgaaa
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 tttttcgttc gcgagaacgg taaaaccctc gcaacctcga tgttcaggt ttgtgtcgcc
 120
 ctgggcgcga cggacctgct tttcgccctc gactcgatc cggcgtccta tggtttcacc
 180
 aacgaggggt accttatcct taccgctaac gtctttgctc tcatggggtt gcgtcagttg
 240
 tatttcccta ttggaagcct gttagaacgt ctgggtgtact tgcgctggg actggtcgtg
 300
 attttgggct ttatcgccct caagctcatt ggccacgcg
 339

<210> 914

<211> 113

<212> PRT

<213> Homo sapiens

<400> 914

Arg	Phe	Met	Ala	Trp	Phe	Arg	Arg	Thr	Val	Pro	Ala	Thr	Gly	Asp	Tyr
1				5					10					15	
Arg	Gly	Thr	Lys	Phe	Phe	Val	Arg	Glu	Asn	Gly	Lys	Thr	Leu	Ala	Thr
			20					25				30			
Ser	Met	Phe	Met	Val	Cys	Val	Ala	Leu	Gly	Ala	Thr	Asp	Leu	Leu	Phe
			35				40					45			
Ala	Leu	Asp	Ser	Ile	Pro	Ala	Ser	Tyr	Gly	Phe	Thr	Asn	Glu	Gly	Tyr
			50			55				60					
Leu	Ile	Leu	Thr	Ala	Asn	Val	Phe	Ala	Leu	Met	Gly	Leu	Arg	Gln	Leu
65			70					75						80	
Tyr	Phe	Leu	Ile	Gly	Ser	Leu	Leu	Glu	Arg	Leu	Val	Tyr	Leu	Ser	Leu
			85					90					95		
Gly	Leu	Val	Val	Ile	Leu	Gly	Phe	Ile	Ala	Leu	Lys	Leu	Ile	Gly	His
			100					105					110		

Ala

<210> 915

<211> 663

<212> DNA

<213> Homo sapiens

<400> 915

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 gacagtgaag atcctgttgt ggacattgtt gctgctaccc ctgtcatcaa tggacagtca
 120
 ttaaccaagg gagagacttg catgaatcct caggatttta agccaggagc aatggttctg
 180
 gagcagaatg gaaaatcggg acacactttg actggtgatg gtctcaatgg accatcagat
 240

gcaagtgcgc agagagtatc catggcatcg tcaggcagct cccagccctga actagtgcact
 300
 atccctttga ttaagggccc taaaggggtt gggtttgcaa ttgctgcacag cctacttgga
 360
 cagaagggtga aaatgatact ggatagtcag tgggtgtcaag gccttcagaa aggagatata
 420
 attaaggaaa tataccatca aaatgtgcag aatttaacac atctccaagt ggtagagggtg
 480
 ctaaagcagt ttccagtagg tgctgatgta ccattgctta tcttaagagg aggtccccct
 540
 tcaccaacca aaagtgccaa aatgaaaaca gataaaaagg aaaatgcagg aagtttggag
 600
 gccataaatg agcctatttc tcagcctatg ccttttccac cgagcattat caggtcagga
 660
 tcc
 663

<210> 916

<211> 221

<212> PRT

<213> Homo sapiens

<400> 916

Xaa	Val	Pro	Val	Asn	Gln	Tyr	Val	Asn	Leu	Thr	Leu	Cys	Arg	Gly	Tyr
1				5				10						15	
Pro	Leu	Pro	Asp	Asp	Ser	Glu	Asp	Pro	Val	Val	Asp	Ile	Val	Ala	Ala
			20					25					30		
Thr	Pro	Val	Ile	Asn	Gly	Gln	Ser	Leu	Thr	Lys	Gly	Glu	Thr	Cys	Met
		35				40						45			
Asn	Pro	Gln	Asp	Phe	Lys	Pro	Gly	Ala	Met	Val	Leu	Glu	Gln	Asn	Gly
	50				55					60					
Lys	Ser	Gly	His	Thr	Leu	Thr	Gly	Asp	Gly	Leu	Asn	Gly	Pro	Ser	Asp
65				70					75					80	
Ala	Ser	Glu	Gln	Arg	Val	Ser	Met	Ala	Ser	Ser	Gly	Ser	Ser	Gln	Pro
			85					90						95	
Glu	Leu	Val	Thr	Ile	Pro	Leu	Ile	Lys	Gly	Pro	Lys	Gly	Phe	Gly	Phe
		100						105					110		
Ala	Ile	Ala	Asp	Ser	Pro	Thr	Gly	Gln	Lys	Val	Lys	Met	Ile	Leu	Asp
		115				120						125			
Ser	Gln	Trp	Cys	Gln	Gly	Leu	Gln	Lys	Gly	Asp	Ile	Ile	Lys	Glu	Ile
	130				135					140					
Tyr	His	Gln	Asn	Val	Gln	Asn	Leu	Thr	His	Leu	Gln	Val	Val	Glu	Val
145				150					155					160	
Leu	Lys	Gln	Phe	Pro	Val	Gly	Ala	Asp	Val	Pro	Leu	Leu	Ile	Leu	Arg
			165					170						175	
Gly	Gly	Pro	Pro	Ser	Pro	Thr	Lys	Ser	Ala	Lys	Met	Lys	Thr	Asp	Lys
		180					185						190		
Lys	Glu	Asn	Ala	Gly	Ser	Leu	Glu	Ala	Ile	Asn	Glu	Pro	Ile	Pro	Gln
	195						200					205			
Pro	Met	Pro	Phe	Pro	Pro	Ser	Ile	Ile	Arg	Ser	Gly	Ser			
	210					215					220				

<210> 917

<211> 615

<212> DNA

<213> Homo sapiens

<400> 917

atcgtggacc agaagttccc tgagtgtggc ttctacggcc ttacgacaa gatectgctt
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 ttcaaacatg accccacgtc ggccaacctc ctgcagctgg tgcgtcgtc cggagacatc
 120
 caggaggcgc acctggtgga ggtggtgctg tcggcctcgg ccaccttcga ggaactccag
 180
 atccgccgc acgcccctcac ggtgcactcc tatcgggcgc ctgccttcgt tgatcaactgc
 240
 ggggagatgc tcttcggcct agtgcgccag ggccccaagt gcgatggctg cgggctgaac
 300
 taccacaagc gctgtgcctt cagcatcccc aacaactgta gtggggcccc caaacggcgc
 360
 ctgtcatcca cgtctctggc cagtggccac tcggtgcgcc tcggcacctc cgagtccctg
 420
 ccctgcacgg ctgaagagga gcgtagcac cacogaactc ctgcctgcgc gtcccgtca
 480
 tctcttctct cctctctcgc ctcatcgtat acggggccgc ccattgagct ggacaagatg
 540
 ctgctctcca aggtcaaggt gccgcacacc ttcctcatcc acagctatac acggcccacc
 600
 gtttccagg cttgc
 615

<210> 918

<211> 148

<212> PRT

<213> Homo sapiens

<400> 918

Ile Val Asp Gln Lys Phe Pro Glu Cys Gly Phe Tyr Gly Leu Tyr Asp
 1 5 10 15
 Lys Ile Leu Leu Phe Lys His Asp Pro Thr Ser Ala Asn Leu Leu Gln
 20 25 30
 Leu Val Arg Ser Ser Gly Asp Ile Gln Glu Gly Asp Leu Val Glu Val
 35 40 45
 Val Leu Ser Ala Ser Ala Thr Phe Glu Asp Phe Gln Ile Arg Pro His
 50 55 60
 Ala Leu Thr Val His Ser Tyr Arg Ala Pro Ala Phe Cys Asp His Cys
 65 70 75 80
 Gly Glu Met Leu Phe Gly Leu Val Arg Gln Gly Leu Lys Cys Asp Gly
 85 90 95
 Cys Gly Leu Asn Tyr His Lys Arg Cys Ala Phe Ser Ile Pro Asn Asn
 100 105 110
 Cys Ser Gly Ala Arg Lys Arg Arg Leu Ser Ser Thr Ser Leu Ala Ser
 115 120 125
 Gly His Ser Val Arg Leu Gly Thr Ser Glu Ser Leu Pro Cys Thr Ala
 130 135 140
 Glu Glu Glu Pro
 145

<210> 919
 <211> 294
 <212> DNA
 <213> Homo sapiens

<400> 919
 accggtatgc gtcgctggc tgtgctggc gacaaacatca ccaccgacca tctatcgccg
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 acaaatgcga tctgctcga tagcgcagcg ggtgagtacc tcgccaagat gggcccgccg
 120
 gaagaagact tcatttcgaa cgcgacccat cgtggcgatc acctgaccgc acagcgcgcc
 180
 accttcgcca acccgacctt gctcaacgag atggccgtag tcgatgggtga agtgaagaaa
 240
 ggctcgcttg cccgctgga accggaaggc catgtgatgc gcatgtggga agcc
 294

<210> 920
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 920
 Thr Gly Met Arg Pro Leu Ala Val Leu Gly Asp Asn Ile Thr Thr Asp
 1 5 10 15
 His Leu Ser Pro Thr Asn Ala Ile Leu Leu Asp Ser Ala Ala Gly Glu
 20 25 30
 Tyr Leu Ala Lys Met Gly Pro Pro Glu Glu Asp Phe Ile Ser Asn Ala
 35 40 45
 Thr His Arg Gly Asp His Leu Thr Ala Gln Arg Ala Thr Phe Ala Asn
 50 55 60
 Pro Thr Leu Leu Asn Glu Met Ala Val Val Asp Gly Glu Val Lys Lys
 65 70 75 80
 Gly Ser Leu Ala Arg Val Glu Pro Glu Gly His Val Met Arg Met Trp
 85 90 95
 Glu Ala

<210> 921
 <211> 378
 <212> DNA
 <213> Homo sapiens

<400> 921
 accggtttgc gcatcgcttt gaccggctcg acgatggctg agtacttcg cgtatgttcag
 60
 aaccaggacg tgctgttgtt catcgacaac atcttccggt tctcccaggc tggttctgag
 120
 gtttcaaccc tgctaggtcg tatgccctcg gcggtgggct accagcccaa cttggccgac
 180
 gagatggggc aattgcagga gcgaatcacc tcgacccgtg gtcactccat cacctcgatg
 240
 caggccgtct acgtccccgc tgacgattac accgacccgg ctccggcgac gaccttcgcc
 300

cacctggatg ccaccacgga gctttctcgt gagattgcct ctctggcct gtaccggcc
 360
 gtggatcgcg tggcgctcg
 378

<210> 922

<211> 126

<212> PRT

<213> Homo sapiens

<400> 922

Thr	Arg	Leu	Arg	Ile	Ala	Leu	Thr	Gly	Leu	Thr	Met	Ala	Glu	Tyr	Phe
1				5					10				15		
Arg	Asp	Val	Gln	Asn	Gln	Asp	Val	Leu	Phe	Ile	Asp	Asn	Ile	Phe	
		20						25				30			
Arg	Phe	Ser	Gln	Ala	Gly	Ser	Glu	Val	Ser	Thr	Leu	Gly	Arg	Met	
		35					40				45				
Pro	Ser	Ala	Val	Gly	Tyr	Gln	Pro	Asn	Leu	Ala	Asp	Glu	Met	Gly	Gln
	50					55					60				
Leu	Gln	Glu	Arg	Ile	Thr	Ser	Thr	Arg	Gly	His	Ser	Ile	Thr	Ser	Met
	65				70				75				80		
Gln	Ala	Val	Tyr	Val	Pro	Ala	Asp	Asp	Tyr	Thr	Asp	Pro	Ala	Pro	Ala
			85						90				95		
Thr	Thr	Phe	Ala	His	Leu	Asp	Ala	Thr	Thr	Glu	Leu	Ser	Arg	Glu	Ile
			100					105					110		
Ala	Ser	Arg	Gly	Leu	Tyr	Pro	Ala	Val	Asp	Pro	Leu	Ala	Ser		
		115					120					125			

<210> 923

<211> 571

<212> DNA

<213> Homo sapiens

<400> 923

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 ctggacaccg cgctggagca cgtgcgcgga gaaatccgca ttaccctgga gcatgcacgc
 120
 caacgcaaga atgtcgaaga agaagacatc ttccgcgcgc accctgcgct attggaagac
 180
 cccacgcctg tggacgcgcg cactgggtgcc atcgaacacg gcagcgcgcg cccccacgcc
 240
 tggcgcgatg caatccaggc gcaatgcgcc gtgtgtctgg cctggggcaa accgctgttt
 300
 gccgagcgcg ccaacgacct gcgcgatctg caacagcgag tactgcgtgc gctgttgggg
 360
 gaagcctggc acttcgaatt gcggccgggg ccgattttca ggnnggccat taacttacc
 420
 ccttcgcgct tgttgcaact gagtgcctaa aacgccgtgg gtattttgat ggccgaaggg
 480
 ggcgctacgt ctacgctgcg gattttggcc cgaggcaaa gcttgcctgg cgtggtcgcg
 540
 ctggggcgccg aagtgtctga cgtgccccaa g
 571

<210> 924
 <211> 190
 <212> PRT
 <213> Homo sapiens

<400> 924
 Thr Gly Ile Glu Leu Pro Gln Asp Thr Gly Lys His Val Ala Asp Glu
 1 5 10 15
 Gln Leu Gln Arg Leu Asp Thr Ala Leu Glu His Val Arg Gly Glu Ile
 20 25 30
 Arg Ile Thr Leu Glu His Ala Arg Gln Arg Lys Asn Val Glu Glu Glu
 35 40 45
 Asp Ile Phe Ala Ala His Leu Ala Leu Leu Glu Asp Pro Thr Leu Leu
 50 55 60
 Asp Ala Ala Thr Gly Ala Ile Glu His Gly Ser Ala Ala Thr His Ala
 65 70 75 80
 Trp Arg Asp Ala Ile Gln Ala Gln Cys Ala Val Leu Leu Ala Leu Gly
 85 90 95
 Lys Pro Leu Phe Ala Glu Arg Ala Asn Asp Leu Arg Asp Leu Gln Gln
 100 105 110
 Arg Val Leu Arg Ala Leu Leu Gly Glu Ala Trp His Phe Glu Leu Pro
 115 120 125
 Ala Gly Pro Ile Phe Arg Xaa Ala Ile Asn Leu Pro Pro Ser Ala Leu
 130 135 140
 Leu Gln Leu Ser Ala Gln Asn Ala Val Gly Ile Cys Met Ala Glu Gly
 145 150 155 160
 Gly Ala Thr Ser His Val Ala Ile Leu Ala Arg Gly Lys Gly Leu Pro
 165 170 175
 Cys Val Val Ala Leu Gly Ala Glu Val Leu Asp Val Pro Gln
 180 185 190

<210> 925
 <211> 620
 <212> DNA
 <213> Homo sapiens

<400> 925
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 ncattggtgtg tgcacgtgtg cnaactgtgta tgcattggtaa tgtgcacgtg tgcactgtgt
 120
 gtgggtgtgta tgcattgtgt gtgcacgtgt gcactgtgtg tgtgtgtatg catgtgtgtg
 180
 cacgtgtgcc tgtgtgtatg catggtaatg tgcgtgtgca ctgtgtggtg tgtatgcacg
 240
 tgtgtgcacg tgtgcactgt gtatgcatag tgtgtgcacg tgtgcactgt gtgtggatgc
 300
 atggtaattg gcacgtgtgc actgtgtgtg gtgtgtatga tgggtgtgtg acgtgtgcac
 360
 ggtgtgtgtg gtgtatgcat gtgtgtgcac gtgtgcactg tgtggcaggg gtgtttgtgtg
 420
 tgtgtgcacg tatgcatggt gtgtgcatac gtgtgcagca gcacctgggc ccatctccag
 480

tgccacgag catcacacgc actttggtgc ttataaaatg catggtcagt gaggtgccca
 540
 gcaccaagct gtccctttac cataaacacct ggaatagtca cctgtgataa gctatcacat
 600
 aggaaacatt tttaaaattt
 620

<210> 926
 <211> 89
 <212> PRT
 <213> Homo sapiens

<400> 926
 Thr Arg Ala Leu Cys Val Cys Met Val Thr Tyr Thr Cys Ala Leu Cys
 1 5 10 15
 Val Val Cys Met Xaa Trp Cys Val His Val Cys Xaa Cys Val Cys Met
 20 25 30
 Val Met Cys Thr Cys Ala Leu Cys Val Val Cys Met His Gly Val Cys
 35 40 45
 Thr Cys Ala Leu Cys Val Cys Val Cys Met Cys Val His Val Cys Leu
 50 55 60
 Cys Val Cys Met Val Met Cys Val Cys Thr Val Trp Cys Val Cys Met
 65 70 75 80
 Cys Val His Val Cys Thr Val Tyr Ala
 85

<210> 927
 <211> 360
 <212> DNA
 <213> Homo sapiens

<400> 927
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 60
 aagaggcatt tggggtcctg ttcagatcat tccaacagca aaccgggcat ggagacccca
 120
 tctcaggtct gtgcttctct gggggccacc cagccatcct gccaccagc tcagaggcag
 180
 ggacaaagcc ctccaagag gcagcaggca gcaagggtca gccagcgagc tggggacagg
 240
 caggtacaac ctggaaaccc caaaggaccc cagatggcaa tgtgacacgg cccatccacc
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<210> 928
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 928
 Met Glu Leu Leu Glu Ile Val Arg His Asp Gln Arg Glu Glu Ala Phe
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 Gly Val Leu Phe Arg Ser Phe Gln Gln Gln Thr Gly His Gly Asp Pro

	20		25		30										
Ile	Ser	Gly	Leu	Cys	Phe	Ser	Gly	His	Pro	Ala	Ile	Leu	Pro	Thr	
	35						40				45				
Ser	Ser	Glu	Ala	Gly	Thr	Lys	Pro	Ser	Gln	Glu	Ala	Ala	Gly	Ser	Lys
	50					55					60				
Gly	Gln	Pro	Ala	Gln	Trp	Gly	Gln	Ala	Gly	Thr	Thr	Trp	Lys	Pro	Gln
65					70					75				80	
Arg	Thr	Pro	Asp	Gly	Asn	Val	Thr	Arg	Pro	Ile	His	Gln	Ala	Pro	Val
			85						90				95		
Met	Pro	Ala	Ser	His	Arg	Gly	Glu	Pro	Asp	Pro	Gly	Thr	Ile	Leu	
			100					105					110		

<210> 929

<211> 2340

<212> DNA

<213> Homo sapiens

<400> 929

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120
aacaacagcc ggctcaaggc caaggggctg ggccagcacg acaacgcccc gaactttggt
180
aaccagagct ttgaggagct gcgagcagcc tgtctaagaa agggggagct cttcaggagc
240
cccttattcc ctgctgaacc cagctcactg ggcttcaagg acctgggccc caactccaaa
300
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360
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420
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540
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600
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660
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720
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840
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900
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960
ggccggattg agtggaatgg agcttggagt gacagtgccg gggagtggga agaggtggcc
1020
tcagacatcc agatgcagct gctgcacaag acggaggagc gggagtctct gatgtcctac
1080

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caagatttcc tgaacaactt cagctcctg gagatctgca acctcacgcc tgatacactc
 1140
 tctggggact acaagagcta ctggcacacc accttctacg agggcagctg gcgcagagggc
 1200
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 1260
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 1380
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 1440
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 1500
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 1560
 ccctccacct ttgagccaca cagagatgct gacttctctg ttcgggtctt caccgagaag
 1620
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 1680
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 1740
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 1800
 aaaagcttca agaccaaggg ctttggcctg gatgcttgcc gctgcatgat caacctctag
 1860
 gataaagatg gctctggcaa gctggggcct ctgagagtta agatcctgtg gaaaaaactc
 1920
 aagaaatgga tggacatctt cagagagtgt gaccaggacc attcaggcac cttgaactcc
 1980
 tatgagatgc ccttggttat tgagaaagca ggcatcaagc tgaacaacaa ggtaatgcag
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 2100
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 2160
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 2220
 tgtaggagcc tggatcatct taccagcagc agcagcagc aggttctagc ccaggagggt
 2280
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 2340

<210> 930

<211> 702

<212> PRT

<213> Homo sapiens

<400> 930

Met Val Ala His Ile Asn Asn Ser Arg Leu Lys Ala Lys Gly Val Gly
 1 5 10 15
 Gln His Asp Asn Ala Gln Asn Phe Gly Asn Gln Ser Phe Glu Leu
 20 25 30
 Arg Ala Ala Cys Leu Arg Lys Gly Glu Leu Phe Glu Asp Pro Leu Phe

35	40	45
Pro Ala Glu Pro Ser Ser Leu Gly Phe Lys Asp Leu Gly Pro Asn Ser		
50	55	60
Lys Asn Val Gln Asn Ile Ser Trp Gln Arg Pro Lys Asp Ile Ile Asn		
65	70	75
Asn Pro Leu Phe Ile Met Asp Gly Ile Ser Pro Thr Asp Ile Cys Gln		
85	90	95
Gly Ile Leu Gly Asp Cys Trp Leu Leu Ala Ala Ile Gly Ser Leu Thr		
100	105	110
Thr Cys Pro Lys Leu Leu Tyr Arg Val Val Pro Arg Gly Gln Ser Phe		
115	120	125
Lys Lys Asn Tyr Ala Gly Ile Phe His Phe Gln Ile Trp Gln Phe Gly		
130	135	140
Gln Trp Val Asn Val Val Asp Asp Arg Leu Pro Thr Lys Asn Asp		
145	150	155
Lys Leu Val Phe Val His Ser Thr Glu Arg Ser Glu Phe Trp Ser Ala		
165	170	175
Leu Leu Glu Lys Ala Tyr Ala Lys Leu Ser Gly Ser Tyr Glu Ala Leu		
180	185	190
Ser Gly Gly Ser Thr Met Glu Gly Leu Glu Asp Phe Thr Gly Gly Val		
195	200	205
Ala Gln Ser Phe Gln Leu Gln Arg Pro Pro Gln Asn Leu Leu Arg Leu		
210	215	220
Leu Arg Lys Ala Val Glu Arg Ser Ser Leu Met Gly Cys Ser Ile Glu		
225	230	235
Val Thr Ser Asp Ser Glu Leu Glu Ser Met Thr Asp Lys Met Leu Val		
245	250	255
Arg Gly His Ala Tyr Ser Val Thr Gly Leu Gln Asp Val His Tyr Arg		
260	265	270
Gly Lys Met Glu Thr Leu Ile Arg Val Arg Asn Pro Trp Gly Arg Ile		
275	280	285
Glu Trp Asn Gly Ala Trp Ser Asp Ser Ala Arg Glu Trp Glu Glu Val		
290	295	300
Ala Ser Asp Ile Gln Met Gln Leu Leu His Lys Thr Glu Asp Gly Glu		
305	310	315
Phe Trp Met Ser Tyr Gln Asp Phe Leu Asn Asn Phe Thr Leu Leu Glu		
325	330	335
Ile Cys Asn Leu Thr Pro Asp Thr Leu Ser Gly Asp Tyr Lys Ser Tyr		
340	345	350
Trp His Thr Thr Phe Tyr Glu Gly Ser Trp Arg Arg Gly Ser Ser Ala		
355	360	365
Gly Gly Cys Arg Asn His Pro Gly Thr Phe Trp Thr Asn Pro Gln Phe		
370	375	380
Lys Ile Ser Leu Pro Glu Gly Asp Asp Pro Glu Asp Asp Ala Glu Gly		
385	390	395
Asn Val Val Val Cys Thr Cys Leu Val Ala Leu Met Gln Lys Asn Trp		
405	410	415
Arg His Ala Arg Gln Gln Gly Ala Gln Leu Gln Thr Ile Gly Phe Val		
420	425	430
Leu Tyr Ala Val Pro Lys Glu Phe Gln Asn Ile Gln Asp Val His Leu		
435	440	445
Lys Lys Glu Phe Phe Thr Lys Tyr Gln Asp His Gly Phe Ser Glu Ile		
450	455	460
Phe Thr Asn Ser Arg Glu Val Ser Ser Gln Leu Arg Leu Pro Pro Gly		

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465          470          475          480
Glu Tyr Ile Ile Ile Pro Ser Thr Phe Glu Pro His Arg Asp Ala Asp
          485          490          495
Phe Leu Leu Arg Val Phe Thr Glu Lys His Ser Glu Ser Trp Glu Leu
          500          505          510
Asp Glu Val Asn Tyr Ala Glu Gln Leu Gln Glu Lys Val Ser Glu
          515          520          525
Asp Asp Met Asp Gln Asp Phe Leu His Leu Phe Lys Ile Val Ala Gly
          530          535          540
Glu Gly Lys Glu Ile Gly Val Tyr Glu Leu Gln Arg Leu Leu Asn Arg
          545          550          555
Met Ala Ile Lys Phe Lys Ser Phe Lys Thr Lys Gly Phe Gly Leu Asp
          565          570          575
Ala Cys Arg Cys Met Ile Asn Leu Met Asp Lys Asp Gly Ser Gly Lys
          580          585          590
Leu Gly Leu Leu Glu Phe Lys Ile Leu Trp Lys Lys Leu Lys Lys Trp
          595          600          605
Met Asp Ile Phe Arg Glu Cys Asp Gln Asp His Ser Gly Thr Leu Asn
          610          615          620
Ser Tyr Glu Met Arg Leu Val Ile Glu Lys Ala Gly Ile Lys Leu Asn
          625          630          635
Asn Lys Val Met Gln Val Leu Val Ala Arg Tyr Ala Asp Asp Gly Leu
          645          650          655
Ile Ile Asp Phe Asp Ser Phe Ile Ser Cys Phe Leu Arg Leu Lys Thr
          660          665          670
Met Phe Thr Phe Phe Leu Thr Met Asp Pro Lys Asn Thr Gly His Ile
          675          680          685
Cys Leu Ser Leu Glu Gln Trp Leu Gln Met Thr Met Trp Gly
          690          695          700

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<210> 931

<211> 297

<212> DNA

<213> Homo sapiens

<400> 931

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tcgcgaaggg agcctgacat gggccagaaa atcaatcccc atggtttccg tctcggtgtg
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acgaccgata acaagaccgc ctggtacgcc gagaagcagt acgcgcagct cgtgggtgag
120
gatgtcaaga tccgagagtg gctccacaag aatctggagc gcgccggtct tctgtccatc
180
gagatcgagc gtcgctccga gcgcgtgacc attttctctt acgcgcgtcg cccgggcata
240
gttatcgggc gcaatggccg ggaggccgag cgcgtgcgtn ntgagctcga aaagctt
297

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<210> 932

<211> 93

<212> PRT

<213> Homo sapiens

<400> 932

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Met Gly Gln Lys Ile Asn Pro His Gly Phe Arg Leu Gly Val Thr Thr

```

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1           5           10           15
Asp His Lys Thr Arg Trp Tyr Ala Glu Lys Gln Tyr Ala Glu Leu Val
      20      25      30
Gly Glu Asp Val Lys Ile Arg Glu Trp Leu His Lys Asn Leu Glu Arg
      35      40      45
Ala Gly Leu Ser Ser Ile Glu Ile Glu Arg Arg Ser Glu Arg Val Thr
      50      55      60
Ile Phe Leu Tyr Ala Ala Arg Pro Gly Ile Val Ile Gly Arg Asn Gly
65      70      75      80
Arg Glu Ala Glu Arg Val Arg Xaa Glu Leu Glu Lys Leu
      85      90

<210> 933
<211> 305
<212> DNA
<213> Homo sapiens

<400> 933
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tccgccgata cgccaagcca agccaatgcc gtgcaggata tggcgggggc aggcatacga
120
gcgctggcca tectgccgac cgaccgggat cagctggttt cggcgatcca gcaggtcaag
180
gacgacggca agttcgtggc gctggtcgac cgtgcgcett ccgtcaacga caacacgata
240
cgcgatctct acgtggccgg caacaacccg gcgctcggcg aagtggcggg caaattcatg
300
ggcga
305

<210> 934
<211> 101
<212> PRT
<213> Homo sapiens

<400> 934
Xaa Arg Val Ala Lys Leu Leu Met Ala Glu Tyr Lys Gly Leu Asn Val
1           5           10           15
Ile Val Lys Thr Ser Ala Asp Pro Ala Ser Gln Ala Asn Ala Val Gln
      20      25      30
Asp Leu Ala Gly Ala Gly Ile Asp Ala Leu Ala Ile Leu Pro Thr Asp
      35      40      45
Pro Asp Gln Leu Val Ser Ala Ile Gln Gln Val Lys Asp Asp Gly Lys
      50      55      60
Phe Val Ala Leu Val Asp Arg Ala Pro Ser Val Asn Asp Asn Thr Ile
65      70      75      80
Arg Asp Leu Tyr Val Ala Gly Asn Asn Pro Ala Leu Gly Glu Val Ala
      85      90      95
Gly Lys Phe Met Gly
      100

<210> 935
<211> 333

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<212> DNA

«213» Homo sapiens

<400> 935

acgcgtgaag ggctgatgag tgctatgaaa aagccagggg ccgagggaca ctgggggtgga
60
caggctcccc tggggaagtc ctcttagaac tgagggatca acactggagg agactgcaag
120
gggtacggga taaatgttcc tgggtgaagga aacagcaggg gcaaaggccc tgcagcagaa
180
aggagcgagg ccctttggag taacagaaag accatggtga caggagctca gaaagaccac
240
tggtgttaag actataagcc agtggaggcc agattgggga atgggatggg aggggtgctt
300
gaagaaccatg gtgagggctct cttaggtcttt act
333

<210> 936

<211> 103

<212> PRT

<213> Homo sapiens

<400> 936

[illegible]

<210> 937

<211> 464

<212> DNA

<213> Homo sapiens

<400> 937

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gacggcgagc acgagctcaa ggatctgttg acggcgcacc tcatggacca gcacaaacct
120
gacgtgccc tggcagggtt gcgtgccagt cacgtcatcg acgaagctcg gcgcgagggt
180
cagcggcgctg ccgatctcgc ccgtggccat ctgcgcacat tcccgcagg gcgtgccgt
240
acgcgcttg agacctgtg cgacgagggt ggttccggcg cggcctgaac ccgacacctg
300

ccagnctgcg tcccatctcc tggcggggac cgtccagcg tctgtctct gacagctcat
 360
 cgttcttcgc acaccaagga gtttctcgtg gcccgctcgc tcatctctcat cggcattggg
 420
 cccggcaacc cggactggat caccctggct gccgtcaagg ccan
 464

<210> 938
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 938
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 1 5 10 15
 Ala Ser Thr Asp Pro Ala Asp Asp Glu Leu Lys Asp Leu Leu Thr Ala
 20 25 30
 Asp Leu Met Asp Gln His Asn Leu Asp Arg Ala Leu Ala Gly Leu Arg
 35 40 45
 Ala Ser His Val Ile Asp Glu Ala Arg Ala Glu Val Gln Arg Arg Ala
 50 55 60
 Asp Leu Ala Arg Gly His Leu Ala Ile Leu Pro Ala Gly Asp Ala Arg
 65 70 75 80
 Thr Ala Leu Glu Thr Leu Cys Asp Glu Val Gly Ser Arg Ala Ala
 85 90 95

<210> 939
 <211> 385
 <212> DNA
 <213> Homo sapiens

<400> 939
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 ggactgtctc cggtcgaggt ggacttcgcc gccacgaaga ccttgccct gtgcacggg
 120
 acatggcggg ggatcgaggt tgggtgctat gaaatccatc acgggcgtct ctgcttcgct
 180
 gaggacgctg aagccttcct cgacggcgta cagctcggtc cgggatgggg gacgatgtgg
 240
 cacggggcat tcgagcacga cgaattccgt cgcacgtggc tggctgacgc ggcccgtcac
 300
 gctggatcat cctggcgtcc gcaactccgac gagctggggt atcagggtcg acgcgaggcg
 360
 atgatcgaaa cctcgcgga cgcgt
 385

<210> 940
 <211> 128
 <212> PRT
 <213> Homo sapiens

<400> 940
 Xaa Thr Ile Leu Asp Pro Asp Gly Gln Glu Thr Thr Pro Gly Ser Val

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      1           5           10           15
Ile Glu Gly Leu Gly Leu Leu Pro Val Glu Val Asp Phe Ala Ala Thr
      20           25           30
Lys Thr Leu Ala Leu Ser His Gly Thr Trp Arg Gly Ile Glu Val Gly
      35           40           45
Gly Tyr Glu Ile His His Gly Arg Leu Ser Phe Ala Glu Asp Ala Glu
      50           55           60
Ala Phe Leu Asp Gly Val His Val Gly Pro Val Trp Gly Thr Met Trp
      65           70           75           80
His Gly Ala Phe Glu His Asp Glu Phe Arg Arg Thr Trp Leu Ala Asp
      85           90           95
Ala Ala Arg His Ala Gly Ser Ser Trp Arg Pro His Ser Asp Glu Leu
      100          105          110
Gly Tyr Gln Ala Arg Arg Glu Ala Met Ile Glu Thr Leu Ala Asp Ala
      115          120          125

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<210> 941

<211> 348

<212> DNA

<213> Homo sapiens

<400> 941

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gaagccatgc aaaccatggt cgtgctggcc gggctgccgt tctcgggtgt gctgattttc
120
ttcatgttgc gtttgcacaa ggcgatgcgc caggacgtgg ccattggagca ggagcaggca
180
caattggctg aacgtggctg ccgtgggttc agcagcgccc tgaccgcgct ggacctgcga
240
ccgagccagg gcaccgtgca acgctttatg gacaaacatg tgacgccggc gttggaacaa
300
gcggcgactg cgttgcgtga tcaagggtcg gaagtgcaga ccctgctt
348

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<210> 942

<211> 116

<212> PRT

<213> Homo sapiens

<400> 942

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Ile Phe Trp Ser Ala Val Ile Thr Leu Val Thr Ile Gly Leu Leu Phe
1           5           10           15
Ala Gly Asn Phe Glu Ala Met Gln Thr Met Val Val Leu Ala Gly Leu
20           25           30
Pro Phe Ser Val Val Leu Ile Phe Phe Met Phe Gly Leu His Lys Ala
35           40           45
Met Arg Gln Asp Val Ala Met Glu Gln Glu Gln Ala Gln Leu Ala Glu
50           55           60
Arg Gly Arg Arg Gly Phe Ser Glu Arg Leu Thr Ala Leu Asp Leu Gln
65           70           75           80
Pro Ser Gln Gly Thr Val Gln Arg Phe Met Asp Lys His Val Thr Pro
85           90           95
Ala Leu Glu Gln Ala Ala Thr Ala Leu Arg Asp Gln Gly Leu Glu Val

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100
Gln Thr Leu Leu
115

<210> 943
<211> 439
<212> DNA
<213> Homo sapiens

<400> 943
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60
ctcctctaataat gcatcctggg ctcctgctaa cctcgtggga aacacgcgtct cttctctctc
120
ttgccctctt ctgtgatcac atcctcaact ctgagcctat ctgcccatcc agtcaatccc
180
ccttggttct gggatgctat tccctggcc gcctccctct aggagtggtt agaaccctca
240
ctgtgggcag aaggaggga agatggctga ggtacctgga aagggacgtg tggatccccg
300
ggcatggaag gaaggaggca ggagagctag aaaaagggat gagatctaata gttccctaag
360
gaacctggct tagtgctggc ccttcacata ctgagacatg gaatccttac tactgtttctc
420
tgaggaaaga ggctgttcc
439

<210> 944
<211> 118
<212> PRT
<213> Homo sapiens

<400> 944
Met Ala Gly Ala Glu Gln Ile Glu Gln Asp Leu Val Ser Phe Ser Leu
1 5 10 15
His Phe Val Pro Pro Leu Met His Pro Gly Leu Leu Leu Thr Leu Trp
20 25 30
Glu Thr Pro Ser Leu Leu Ser Phe Ala Leu Phe Cys Asp His Ile Leu
35 40 45
Thr Ser Glu Pro Ile Cys Pro Ser Ser Gln Ser Pro Leu Val Leu Gly
50 55 60
Cys Tyr Phe Pro Gly Arg Leu Pro Leu Gly Val Phe Arg Thr Leu Thr
65 70 75 80
Val Gly Arg Arg Glu Gly Arg Trp Leu Arg Tyr Leu Glu Arg Asp Val
85 90 95
Trp Ile Pro Gly His Gly Arg Lys Glu Ala Gly Glu Leu Glu Lys Gly
100 105 110
Met Arg Ser Asn Val Pro
115

<210> 945
<211> 339
<212> DNA
<213> Homo sapiens

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<400> 945
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 gagatgggtga tatatatata tactcacaca catatatatg tgtgtgtgtg tatatatgta
 120
 tatatatata gogtgtacaa caaaacatgc actgtttact cagcaccocg tgtttgtctc
 180
 agcaaatagct tttctaaga actgctacta tttgaaatgg agggggaggg gggctctgga
 240
 cagagtattg tgcaagtga aagtctctgg atggggctat gtatataccta ccagccaatt
 300
 tgggtgcaaa ttggatttga aggcctgcct ctgtccacn
 339

<210> 946
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 946
 Xaa Ile Arg Glu Ala Phe His Ile Phe Phe Leu Leu Ile Ile Ser Ile
 1 5 10 15
 Ala Leu Tyr Val Glu Met Val Ile Tyr Ile Tyr Thr His Thr His Ile
 20 25 30
 Tyr Val Cys Val Cys Ile Tyr Val Tyr Ile Tyr Ser Val Tyr Asn Lys
 35 40 45
 Thr Cys Thr Val Tyr Ser Ala Pro Arg Val Cys Leu Ser Asn Ser Phe
 50 55 60
 Ser Lys Glu Leu Leu Leu Phe Glu Met Glu Gly Glu Gly Gly Pro Gly
 65 70 75 80
 Gln Ser Ile Val Gln Val Glu Ser Leu Trp Met Gly Leu Cys Ile Ser
 85 90 95
 Tyr Gln Pro Ile Trp Val Gln Ile Gly Phe Glu Gly Leu Pro Leu Ser
 100 105 110
 Thr

<210> 947
 <211> 648
 <212> DNA
 <213> Homo sapiens

<400> 947
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 120
 agtagtgctg ccggctcaag cgatgcctca gcctttctgc tgtgtgcgaa gctttgcaga
 180
 ggagatgatg cttcaaagt gtccctgttg gggatgagca gccaggcctt tatacactgg
 240
 gacagtcagt catggatacg tggatactct ggaaaccctc atccctggag gtctgagccc
 300

ctggatacca tgcccttctt aggcctggagt tgctgccctt gtccatttac cataaaaaatt
 360
 ggacaagaga ataccaggac acacctgagt ttctcatcgt atgctaaacc tgttcttcca
 420
 cgtacatccc caatgtgtac agccctactt tttctcgtg atcaagtcca attactttctg
 480
 ctaagatggg gactattctt gcctgctggg ccttggatgc aaggacccca atgttcaggc
 540
 agcctttggg gccttcttagc atacgaatca gagcattatc tttaggtgtg gaataagctg
 600
 ccccaaaacc tgttgaagcc agccaggcac tgtgctccct tcacgcgt
 648

<210> 948
 <211> 154
 <212> PRT
 <213> Homo sapiens

<400> 948
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 Leu Cys Thr Gly Val Gly Lys Glu Trp Thr Gly Val Asp Lys Ser Ser
 20 25 30
 Ser Ala Ala Gly Ser Ser Asp Ala Ser Ala Phe Leu Leu Cys Ala Lys
 35 40 45
 Leu Cys Arg Gly Asp Asp Ala Ser Lys Leu Ser Leu Leu Gly Met Ser
 50 55 60
 Ser Gln Ala Phe Ile His Trp Asp Ser Gln Ser Trp Ile Arg Gly Tyr
 65 70 75 80
 Ser Gly Asn Pro His Pro Trp Arg Ser Glu Pro Leu Asp Thr Met Pro
 85 90 95
 Phe Leu Gly Trp Ser Cys Cys Pro Cys Pro Phe Thr Ile Lys Ile Gly
 100 105 110
 Gln Glu Asn Thr Arg Thr His Leu Ser Phe Ser Ser Tyr Ala Lys Pro
 115 120 125
 Val Leu Pro Arg Thr Ser Pro Met Cys Thr Ala Leu Leu Phe Ser Ala
 130 135 140
 Asp Gln Val Gln Leu Leu Leu Arg Trp
 145 150

<210> 949
 <211> 661
 <212> DNA
 <213> Homo sapiens

<400> 949
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<210> 950

<211> 210

<212> PRT

<213> Homo sapiens

<400> 950

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Val	Thr	Phe	Leu	Asn	Leu	Gly	Gln	Ile	Gln	Glu	His	Gly	Ser	Ser	Tyr
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Ile	Arg	Gly	Cys	Ala	Phe	His	His	Gly	Phe	Ser	Pro	Ala	Ile	Gly	Val
			50			55					60				
Phe	Gly	Thr	Asp	Gly	Leu	Asp	Ile	Asp	Asp	Asn	Ile	Ile	His	Phe	Thr
65				70						75				80	
Val	Gly	Glu	Gly	Ile	Arg	Ile	Trp	Gly	Asn	Ala	Asn	Arg	Val	Arg	Gly
				85					90					95	
Asn	Leu	Ile	Ala	Leu	Ser	Val	Trp	Pro	Gly	Thr	Tyr	Gln	Asn	Arg	Lys
			100					105				110			
Asp	Leu	Ser	Ser	Thr	Leu	Trp	His	Ala	Ala	Ile	Glu	Ile	Asn	Arg	Gly
			115				120					125			
Thr	Asn	Thr	Val	Leu	Gln	Asn	Asn	Val	Val	Ala	Gly	Phe	Gly	Arg	Ala
			130			135					140				
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Met	Asn	Gln	Asp	Gly	Leu	Pro	Gly	Cys	Ser	Leu	Ile	Gln	Gly	Phe	Thr
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Ile	Trp	Thr	Cys	Trp	Asp	Tyr	Gly	Ile	Tyr	Phe	Gln	Thr	Thr	Glu	Ser
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<210> 951

<211> 2615

<212> DNA

<213> Homo sapiens

<400> 951

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<210> 952

<211> 357

<212> PRT

<213> Homo sapiens

<400> 952

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 20 25 30
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 35 40 45
 Cys Ser Gly Leu Gly Pro His Ile Met Pro Val Pro Ile Pro Leu Asp
 50 55 60
 Thr Ala His Leu Asp Leu Ser Ser Asn Arg Leu Glu Met Val Asn Glu

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<210> 954

<211> 103

<212> PRT

<213> Homo sapiens

<400> 954

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Asp	Thr	Ala	Leu	His	Asp	Ser	Pro	Gln	Arg	Ala	His	Leu	Glu	Gly	Glu
		20						25					30		
Arg	Lys	Gly	His	Glu	Arg	Val	Lys	Arg	Asn	Gly	Phe	Ser	Leu	Pro	Ser
		35					40					45			
Tyr	Cys	Val	Ser	Ala	Ala	Val	Thr	Pro	Gln	Ser	Arg	Gln	Val	Gln	Gln
	50					55				60					
Ser	Arg	His	Gly	Lys	Thr	Ser	Thr	Pro	Asn	Asp	Gly	Ser	Arg	Asp	Gly
65				70						75				80	
Glu	Ser	Val	Val	His	Thr	Leu	Arg	Gly	Asp	Pro	Arg	Glu	Thr	Gly	Leu
				85					90					95	
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				100											

<210> 955

<211> 634

<212> DNA

<213> Homo sapiens

<400> 955

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<210> 956

<211> 113
 <212> PRT
 <213> Homo sapiens

<400> 956
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 35 40 45
 Val Thr Glu Ala Leu Thr Cys Arg Ala Ala His Leu Gln Ser Arg Ser
 50 55 60
 Pro Ala Glu Pro Phe Thr Cys Arg Ala Leu His Leu Gln Asn Arg Ser
 65 70 75 80
 Pro Ala Glu Pro Phe Thr Cys Arg Thr Ile His Leu Gln Ser Arg Ser
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 Pro Ala Glu Pro Phe Thr Cys Arg Ala Ala His Leu Gln Ser Pro Ser
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<210> 957
 <211> 823
 <212> DNA
 <213> Homo sapiens

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<210> 958

<211> 105

<212> PRT

<213> Homo sapiens

<400> 958

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Val	Ser	Gln	Val	Pro	Thr	Gly	Thr	Ser	Pro	Leu	Gln	Ala	Phe	Trp	Asp
			20					25					30		
Pro	His	Trp	Leu	Arg	Trp	Ala	Leu	His	Ser	Thr	Pro	Thr	Gly	Lys	Leu
		35					40					45			
Leu	Phe	Leu	Pro	Ser	Ser	Lys	Val	Pro	Lys	Leu	Pro	Gly	Cys	Ser	Val
		50				55					60				
Gly	Pro	Arg	Leu	Gln	His	Thr	Leu	Glu	Ala	Ala	Pro	His	Pro	Val	Ser
65				70					75					80	
Trp	Phe	Arg	Leu	Leu	Gln	Ala	Leu	Ser	Ser	Ala	Gly	His	Pro	Leu	Leu
			85						90					95	
Pro	Val	Ser	Arg	Pro	Leu	Gly	Thr	Ala							
			100				105								

<210> 959

<211> 586

<212> DNA

<213> Homo sapiens

<400> 959

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<210> 960

<211> 195

<212> PRT

<213> Homo sapiens

<400> 960

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 35 40 45
 Asn Leu Ser Leu Asn Val Ile Lys Thr Thr Lys Met Ile Val Asp Tyr
 50 55 60
 Arg Lys Arg Arg Val Glu His Ala Pro Ile Leu Ile Asp Gly Ala Val
 65 70 75 80
 Trp Glu Pro Val Glu Ser Phe Lys Phe Leu Gly Val His Ile Thr Ile
 85 90 95
 Glu Leu Ser Trp Ser Lys His Thr Lys Thr Val Val Lys Arg Val Arg
 100 105 110
 Gln Cys Leu Phe His Leu Gly Arg Gln Lys Arg Phe Gly Met Asp Pro
 115 120 125
 Gln Thr Leu Lys Lys Phe Asp Ile Tyr Thr Ile Glu Ser Ile Met Thr
 130 135 140
 Gly Cys Ile Thr Ala Trp Tyr Gly Asn Cys Ser Ala Ser Asp Arg Lys
 145 150 155 160
 Ala Leu Gln Arg Val Val Arg Thr Ala Gln Tyr Ile Thr Gly Ala Lys
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 Leu Pro Ala Ile Gln Asp Leu Tyr Thr Arg Cys Gln Arg Lys Thr
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 Leu Thr Ile
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<210> 961

<211> 502

<212> DNA

<213> Homo sapiens

<400> 961

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<210> 962
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 962
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 35 40 45
 Thr Pro Gln Phe Phe Pro Ser Ser Pro Pro Pro His Ser Pro Ile Ser
 50 55 60
 His Gly His Ile Pro Ser Ala Ile Val Leu Pro Asn Ala Thr His Asp
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<210> 963
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 <212> DNA
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<400> 963
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<210> 964

<211> 235

<212> PRT

<213> Homo sapiens

<400> 964

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Gly	His	Ser	Ala	Lys	Arg	Pro	Arg	Pro	Ser	Thr	Gly	Ser	Gln	Lys	Ser
			20					25					30		
Ser	Ser	Ser	Arg	Arg	Pro	Arg	Ser	Arg	Ala	Ala	Asn	Arg	Pro	Gln	Trp
			35					40				45			
Thr	Pro	Gly	Cys	Ser	Ala	Arg	Ala	Pro	Ala	Trp	Ala	Pro	Ala	Asn	Ser
			50				55				60				
Pro	Ser	Arg	Arg	Val	Pro	Arg	Ser	Cys	Gly	Leu	Gly	Ala	Gly	Ser	Gly
65				70				75						80	
Gly	Ser	Pro	Ala	Ala	Ala	Ala	Ser	Thr	Arg	Gln	Ala	Ser	Pro	Trp	Ala
			85					90						95	
Ser	Cys	Pro	Ser	Arg	Thr	Arg	Pro	His	Ser	Ile	Thr	Arg	Ala	Pro	Ala
			100					105					110		
Ser	Arg	Cys	Thr	Gly	Leu	Arg	Ala	Ser	Arg	Thr	Trp	Ala	Ser	Ile	Met
			115					120					125		
Thr	Ile	Thr	Ala	Thr	Ala	Thr	Thr	Thr	Thr	Thr	Gly	Ser	His	Ser	Thr
			130					135					140		
Ala	Thr	Arg	Ser	Arg	Asn	Pro	Thr	Trp	Arg	Ala	Ser	Ala	Pro	Thr	Ala
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			180					185					190		
Arg	Gly	Thr	Pro	Thr	Ala	Thr	Ala	Thr	Thr	Ile	Thr	Asn	Pro	His	Met
			195				200						205		
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			210				215						220		
Arg	Ala	Arg	Arg	Thr	Leu	Met	Ala	Thr	Thr	Trp					

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<210> 968

<211> 125

<212> PRT

<213> Homo sapiens

<400> 968

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Ser	Pro	Ser	Ala	Ser	Ala	Ser	Ala	Ala	Ala	Trp	Ala	Ala	Pro	Asp	Ser
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Ala	Gly	Gly	Thr	Phe	Ser	Arg	Val	Arg	Gln	Pro	Asn	Gly	Val	Ala	Gly
	50				55				60						
Ser	Ser	Ile	Gln	Ser	Gly	Ala	Phe	Gly	Thr	Pro	Ala	Leu	Arg	Arg	Glu
65			70					75						80	
Ala	Ala	Arg	Asn	Asp	Gly	Thr	Gly	Gly	Ala	Gly	Gly	Asp	Thr	Gly	Ala
			85					90					95		
Ser	Ala	Gly	Ala	Leu	Thr	Asp	Ser	Gly	Thr	Thr	Gly	Ala	Ala	Cys	Ala
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Ser	Cys	Gly	Gly	Ala	Thr	Gly	Ser	Leu	Arg	Gly	Gly	Asp			
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<210> 969

<211> 880

<212> DNA

<213> Homo sapiens

<400> 969

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<210> 970

<211> 263

<212> PRT

<213> Homo sapiens

<400> 970

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		20						25				30			
Leu	Thr	Leu	Pro	Ser	Leu	Val	Cys	Glu	Val	Leu	Asp	Leu	Met	Val	Glu
		35					40				45				
Phe	Ile	Val	Thr	His	Met	Met	Lys	Glu	Phe	Pro	Met	Asp	Leu	Tyr	Ile
		50				55				60					
Arg	Cys	Ile	Gln	Val	Val	His	Lys	Leu	Leu	Cys	Tyr	Gln	Lys	Lys	Cys
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Arg	Val	Arg	Leu	His	Tyr	Thr	Trp	Arg	Glu	Leu	Trp	Ser	Ala	Leu	Ile
			85					90					95		
Asn	Leu	Leu	Lys	Phe	Leu	Met	Ser	Asn	Glu	Thr	Val	Leu	Leu	Ala	Lys
			100					105					110		
His	Asn	Ile	Phe	Thr	Leu	Ala	Leu	Met	Ile	Val	Asn	Leu	Phe	Asn	Met
			115				120					125			
Phe	Ile	Thr	Tyr	Gly	Asp	Thr	Phe	Leu	Pro	Thr	Pro	Ser	Ser	Tyr	Asp
		130				135					140				
Glu	Leu	Tyr	Tyr	Glu	Ile	Ile	Arg	Met	His	Gln	Ser	Phe	Asp	Asn	Leu
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Tyr	Ser	Met	Val	Leu	Arg	Leu	Ser	Thr	Asn	Ala	Gly	Gln	Trp	Lys	Glu
			165						170					175	
Ala	Ala	Ser	Lys	Val	Thr	His	Ala	Leu	Val	Asn	Ile	Arg	Ala	Ile	Ile
			180				185						190		
Asn	His	Phe	Asn	Pro	Lys	Ile	Glu	Ser	Tyr	Ala	Ala	Val	Asn	His	Ile
			195				200					205			
Ser	Gln	Leu	Ser	Glu	Glu	Gln	Val	Leu	Glu	Val	Val	Arg	Ala	Asn	Tyr
			210			215					220				
Asp	Thr	Leu	Thr	Leu	Lys	Leu	Gln	Asp	Gly	Leu	Asp	Gln	Tyr	Glu	Arg
225				230						235					240
Tyr	Ser	Glu	Gln	His	Lys	Glu	Ala	Ala	Phe	Phe	Lys	Glu	Leu	Val	Arg
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<210> 971
 <211> 337
 <212> DNA
 <213> Homo sapiens

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 240
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<210> 972
 <211> 112
 <212> PRT
 <213> Homo sapiens

<400> 972
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 Lys Trp Ser Phe Val Pro Gln Asn Asn Pro Asn Pro Lys Tyr Leu Val
 35 40 45
 Val Asn Gly Asp Glu Ser Glu Pro Gly Thr Cys Lys Asp Met Pro Leu
 50 55 60
 Ile Met Ala Ser Pro His Thr Leu Val Glu Gly Ala Leu Ile Ser Arg
 65 70 75 80
 Tyr Ala Phe Gly Ser Glu Gln Ala Phe Ile Tyr Leu Arg Gly Glu Val
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 Val Gln Val Ala Arg Arg Leu Glu Glu Lys Lys Lys Met Arg Xaa Xaa
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<210> 973
 <211> 360
 <212> DNA
 <213> Homo sapiens

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<210> 974

<211> 91

<212> PRT

<213> Homo sapiens

<400> 974

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 20 25 30
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 35 40 45
 Gly Asp Ser Ser Gly Cys Val Thr Leu Arg Thr Thr Gly Lys Val Ala
 50 55 60
 Leu Gly Ser Glu Ile Arg Val His Ile Leu Gly Leu Pro Leu Thr Asp
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 Cys Asn Gly Gly Gln Val Thr Cys Arg Ala Gln
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<210> 975

<211> 2604

<212> DNA

<213> Homo sapiens

<400> 975

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 2604

<210> 976
 <211> 411
 <212> PRT
 <213> Homo sapiens

<400> 976
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 35 40 45
 Arg Gly Ala Val Ser Val Asp Ser Leu Ala Glu Leu Glu Asp Gly Ala
 50 55 60
 Leu Leu Leu Gln Thr Leu Gln Leu Ser Lys Ile Ser Phe Pro Ile Gly
 65 70 75 80
 Gln Arg Leu Leu Gly Ser Lys Arg Lys Met Ser Leu Asn Pro Ile Ala
 85 90 95
 Lys Gln Ile Pro Gln Val Val Glu Ala Cys Cys Gln Phe Ile Glu Lys
 100 105 110
 His Gly Leu Ser Ala Val Gly Ile Phe Thr Leu Glu Tyr Ser Val Gln
 115 120 125
 Arg Val Arg Gln Leu Arg Glu Glu Phe Asp Gln Gly Leu Asp Val Val
 130 135 140
 Leu Asp Asp Asn Gln Asn Val His Asp Val Ala Ala Leu Leu Lys Glu
 145 150 155 160
 Phe Phe Arg Asp Met Lys Asp Ser Leu Leu Pro Asp Asp Leu Tyr Met
 165 170 175
 Ser Phe Leu Leu Thr Ala Thr Leu Lys Pro Gln Asp Gln Leu Ser Ala
 180 185 190
 Leu Gln Leu Leu Val Tyr Leu Thr Pro Pro Cys His Ser Asp Thr Leu
 195 200 205
 Glu Arg Leu Leu Lys Ala Leu His Lys Ile Thr Glu Asn Cys Glu Asp
 210 215 220
 Ser Ile Gly Ile Asp Gly Gln Leu Val Pro Gly Asn Arg Met Thr Ser
 225 230 235 240
 Thr Asn Leu Ala Leu Val Phe Gly Ser Ala Leu Leu Lys Lys Gly Lys
 245 250 255
 Phe Gly Lys Arg Glu Ser Arg Lys Thr Lys Leu Gly Ile Asp His Tyr
 260 265 270
 Val Ala Ser Val Asn Val Val Arg Ala Met Ile Asp Asn Trp Asp Val

275	280	285
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Trp Lys Ser Ser Pro Glu Ala Leu Asp Phe Ile Arg Arg Arg Asn Leu		
305	310	315
Arg Lys Ile Gln Ser Ala Arg Ile Lys Met Glu Glu Asp Ala Leu Leu		
325	330	335
Ser Asp Pro Val Glu Thr Ser Ala Glu Ala Arg Ala Ala Val Leu Ala		
340	345	350
Gln Ser Lys Pro Ser Asp Glu Gly Ser Ser Glu Glu Pro Ala Val Pro		
355	360	365
Ser Gly Thr Ala Arg Ser His Asp Asp Glu Glu Gly Ala Gly Asn Pro		
370	375	380
Pro Ile Pro Glu Gln Asp Arg Pro Leu Leu Arg Val Pro Arg Glu Lys		
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405	410	

<210> 977

<211> 378

<212> DNA

<213> Homo sapiens

<400> 977

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<210> 978

<211> 126

<212> PRT

<213> Homo sapiens

<400> 978

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20	25	30
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35	40	45
Val Cys Leu Ala Ser Asp Ala Gln Phe Ser Asp Phe Leu Gly Ser Met		
50	55	60
Gly Pro Ala Gln Phe Val Gly Arg Gln Thr Leu Ala Thr Thr Pro Met		

65		70		75		80									
Gly	Asp	Val	Glu	Ile	Gly	Leu	Gln	Glu	Arg	Gly	Gln	Leu	Glu	Val	
			85					90					95		
Asp	Ile	Ile	Gln	Ala	Arg	Gly	Leu	Thr	Ala	Lys	Pro	Gly	Ser	Lys	Thr
			100					105					110		
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<210> 979

<211> 3500

<212> DNA

<213> Homo sapiens

<400> 979

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1200

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<210> 980

<211> 73

<212> PRT

<213> Homo sapiens

<400> 980

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Leu	Ala	Gln	Gly	Arg	Gly	Cys	Arg	Gln	Gly	Lys	Gly	His	Trp	Pro	Pro
		20						25				30			
Cys	Phe	Gln	Val	Leu	Thr	Ala	Ser	Gly	Trp	Ser	Leu	Glu	Ala	Thr	Glu
		35				40					45				
Glu	Arg	Asn	Ala	Trp	Leu	Arg	Ala	Ala	Glu	His	Ser	Glu	Ala	Ser	Arg
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Glu	Asp	Ser	Arg	Pro	Ala	Arg	Ala	Pro							
65					70										

<210> 981

<211> 404

<212> DNA

<213> Homo sapiens

<400> 981

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 180

accgcactcg cggagcgagg tgccgcaggc ggggagggtt accaccggtt tgggtggagac
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 300
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<210> 982

<211> 134

<212> PRT

<213> Homo sapiens

<400> 982

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 20 25 30
 Thr Ala Pro Val Gly Trp Glu Leu Val Arg Val Glu His Val Glu Leu
 35 40 45
 Asp Asp Glu Asp Val Asp Asp Glu Asn Thr Asp Ile Thr Ala Leu Ala
 50 55 60
 Glu Ala Gly Ala Arg Gly Gly Ala Gly Asn His Arg Phe Gly Gly Asp
 65 70 75 80
 Arg Pro Gly Ser Asp Arg Val Leu Gly Arg Gln Arg Leu Gln Gln Pro
 85 90 95
 Arg His Leu Gln Pro Ser Gly Ala Pro Asp Gln Ala Cys Gly Gly Thr
 100 105 110
 Ala Ser Gly Ala Gln Gly Gly Ala Pro Leu Pro Pro Ala His Cys Pro
 115 120 125
 Gly Ser Glu Pro Gly Arg
 130

<210> 983

<211> 579

<212> DNA

<213> Homo sapiens

<400> 983

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 420

ttgtggttag tgttgcgtctc ttttcagtag actgtaagct ccataaagca gggacttctg
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<210> 984
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 984
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 20 25 30
 Ile Thr Leu Asn Ile Thr His Ser Ser Pro Ala Thr Leu Ala Ser Leu
 35 40 45
 Leu Phe Pro Lys Arg Ala Arg Tyr Pro Ser Phe Ser Gly Pro Leu Tyr
 50 55 60
 Leu Phe Phe Ser Leu Pro Glu Thr Pro Phe Leu Leu Asn Asn Leu Met
 65 70 75 80
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 85 90 95
 Val Phe Pro Asp Gln His Ile
 100

<210> 985
 <211> 313
 <212> DNA
 <213> Homo sapiens

<400> 985
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 180
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 300
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 313

<210> 986
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 986
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Gln Leu Gly Asn Ile Gln Met Ser Tyr Ser Ala Lys Asn Ile Asp Val			
	20	25	30
Ala Asn Phe Lys Ala His Asp Leu Lys Leu Val Thr Glu Ile Asn His			
	35	40	45
Leu Asp Asn Gln Ile Phe Ile Asp Tyr Ala Lys Leu Ile Lys Glu Ser			
	50	55	60
Asp Ala Leu Pro Val Asp Gln Gln Val Ala Phe Phe Leu Asn Asn Met			
	65	70	75
Gln Ser Ile Ile Asp Gly Lys Pro Glu Leu Asn Ile Thr Glu Leu Ser			
	85	90	95
Gly Phe			

<210> 987

<211> 4224

<212> DNA

<213> Homo sapiens

<400> 987

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<210> 988
 <211> 873
 <212> PRT
 <213> Homo sapiens

<400> 988

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Ala His Lys Tyr Leu Pro Ala Leu Asp Glu Phe Pro His Pro Pro Lys
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Arg Leu Arg Ser Asp Pro Asp Ala Cys Pro Thr Met Pro Leu Leu Ala
 20          25          30
Met Leu Leu Arg Gly Leu Thr Gln Ile Gln Ser Arg Ile Leu Gly Pro
 35          40          45
Gly Arg Lys Cys Cys Ala Leu Ala Asn Leu Ala Asp Met Leu Thr Val
 50          55          60
Phe Ala Leu Thr Glu Asp Asp Pro Gln Glu Val Ser Ala Thr Val Tyr
 65          70          75          80
Leu Asp Lys Leu Ala Thr Val Ile Ser Val Trp Asn Ser Asp Thr Gln
 85          90          95
Asn Pro Tyr His Gln Gln Ala Leu Ala Glu Lys Val Lys Glu Ala Glu
100          105          110
Arg Asp Val Ser Leu Thr Ser Leu Ala Lys Leu Pro Ser Glu Thr Ile
115          120          125
Phe Val Gly Cys Glu Phe Leu His His Leu Leu Arg Glu Trp Gly Glu
130          135          140
Glu Leu Gln Ala Val Leu Arg Ser Ser Gln Gly Thr Ser Tyr Asp Ser
145          150          155          160
Tyr Arg Leu Cys Asp Ser Leu Thr Ser Phe Ser Gln Asn Ala Thr Leu
165          170          175
Tyr Leu Asn Arg Thr Ser Leu Ser Lys Glu Asp Arg Gln Val Val Ser
180          185          190
Glu Leu Ala Glu Cys Val Arg Asp Phe Leu Arg Lys Thr Ser Thr Val
195          200          205
Leu Lys Asn Arg Ala Leu Glu Asp Ile Thr Ala Ser Ile Ala Met Ala
210          215          220
Val Ile Gln Gln Lys Met Asp Arg His Met Glu Val Cys Tyr Ile Phe
225          230          235          240
Ala Ser Glu Lys Lys Trp Ala Phe Ser Asp Glu Trp Val Ala Cys Leu
245          250          255
Gly Ser Asn Arg Ala Leu Phe Arg Glu Pro Asp Leu Val Leu Arg Leu
260          265          270
Leu Glu Thr Val Ile Asp Val Ser Thr Ala Asp Arg Ala Ile Pro Glu
275          280          285
Ser Gln Ile Arg Gln Val Ile His Leu Ile Leu Glu Cys Tyr Ala Asp
290          295          300
Leu Ser Leu Pro Gly Lys Asn Lys Val Leu Ala Gly Ile Leu Arg Ser
305          310          315          320
Trp Gly Arg Lys Gly Leu Ser Glu Lys Leu Leu Ala Tyr Val Glu Gly
325          330          335
Phe Gln Glu Asp Leu Asn Thr Thr Phe Asn Gln Leu Thr Gln Ser Ala
340          345          350
Ser Glu Gln Gly Leu Ala Lys Ala Val Ala Ser Val Ala Arg Leu Val
355          360          365
Ile Val His Pro Glu Val Thr Val Lys Lys Met Cys Ser Leu Ala Val

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370          375          380
Val Asn Leu Gly Thr His Lys Phe Leu Ala Gln Ile Leu Thr Ala Phe
385          390          395          400
Pro Ala Leu Arg Phe Val Glu Val Gln Gly Pro Asn Ser Ser Ala Thr
          405          410          415
Phe Met Val Ser Cys Leu Lys Glu Thr Val Trp Met Lys Phe Ser Thr
          420          425          430
Pro Lys Glu Glu Lys Gln Phe Leu Glu Leu Leu Asn Cys Leu Met Ser
          435          440          445
Pro Val Lys Pro Gln Gly Ile Pro Val Ala Ala Leu Leu Glu Pro Asp
          450          455          460
Glu Val Leu Lys Glu Phe Val Leu Pro Phe Leu Arg Leu Asp Val Glu
          465          470          475          480
Glu Val Asp Leu Ser Leu Arg Ile Phe Ile Gln Thr Leu Glu Ala Asn
          485          490          495
Ala Cys Arg Glu Glu Tyr Trp Leu Gln Thr Cys Ser Pro Phe Pro Leu
          500          505          510
Leu Phe Ser Leu Cys Gln Leu Leu Asp Arg Phe Ser Lys Tyr Trp Gln
          515          520          525
Leu Pro Lys Glu Lys Arg Cys Leu Ser Leu Asp Arg Lys Asp Leu Ala
          530          535          540
Ile His Ile Leu Glu Leu Leu Cys Glu Ile Val Ser Ala Asn Ala Glu
          545          550          555          560
Thr Phe Ser Pro Asp Val Trp Ile Lys Ser Leu Ser Trp Leu His Arg
          565          570          575
Lys Leu Glu Gln Leu Asp Trp Thr Val Gly Leu Arg Leu Lys Ser Phe
          580          585          590
Phe Glu Gly His Phe Lys Cys Glu Val Pro Ala Thr Leu Phe Glu Ile
          595          600          605
Cys Lys Leu Ser Glu Asp Glu Trp Thr Ser Gln Ala His Pro Gly Tyr
          610          615          620
Gly Ala Gly Thr Gly Leu Leu Ala Trp Met Glu Cys Cys Cys Val Ser
          625          630          635          640
Ser Gly Ile Ser Glu Arg Met Leu Ser Leu Leu Val Val Asp Val Gly
          645          650          655
Asn Pro Glu Glu Val Arg Leu Phe Ser Lys Gly Phe Leu Val Ala Leu
          660          665          670
Val Gln Val Met Pro Trp Cys Ser Pro Gln Glu Trp Gln Arg Leu His
          675          680          685
Gln Leu Thr Arg Arg Leu Leu Glu Lys Gln Leu Leu His Val Pro Tyr
          690          695          700
Ser Leu Glu Tyr Ile Gln Phe Val Pro Leu Leu Asn Leu Lys Pro Phe
          705          710          715          720
Ala Gln Glu Leu Gln Leu Ser Val Leu Phe Leu Arg Thr Phe Gln Phe
          725          730          735
Leu Cys Ser His Ser Cys Arg Asn Trp Leu Pro Leu Glu Gly Trp Asn
          740          745          750
His Val Val Lys Leu Leu Cys Gly Ser Leu Thr Arg Leu Leu Asp Ser
          755          760          765
Val Arg Ala Ile Gln Ala Ala Gly Pro Trp Val Gln Gly Pro Glu Gln
          770          775          780
Asp Leu Thr Gln Glu Ala Leu Phe Val Tyr Thr Gln Val Phe Cys His
          785          790          795          800
Ala Leu His Ile Met Ala Met Leu His Pro Glu Val Cys Glu Pro Leu

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      805              810              815
Tyr Val Leu Ala Leu Glu Thr Leu Thr Cys Tyr Glu Thr Leu Ser Lys
      820              825              830
Thr Asn Pro Ser Val Ser Ser Leu Leu Gln Arg Ala His Glu Gln Cys
      835              840              845
Phe Leu Lys Ser Ile Ala Glu Gly Ile Gly Pro Glu Glu Arg Arg Gln
      850              855              860
Thr Leu Leu Gln Lys Met Ser Ser Phe
      865              870

<210> 989
<211> 402
<212> DNA
<213> Homo sapiens

<400> 989
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240
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atcgaaggca agaaagacgc taaacgcgcc aagatcctcg ag
402

<210> 990
<211> 134
<212> PRT
<213> Homo sapiens

<400> 990
Ala Trp Asp Ile Asp Thr Arg Leu Glu Gln Ala Met Asp Ala Leu Gln
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Cys Pro Pro Gly Asp Thr Pro Val Asp Val Leu Ser Gly Gly Glu Arg
20 25 30
Arg Arg Val Ala Leu Cys Lys Leu Leu Ile Glu Gln Pro Asp Leu Leu
35 40 45
Leu Leu Asp Glu Pro Thr Asn His Leu Asp Ala Glu Ser Val Asn Trp
50 55 60
Leu Glu Gly His Leu Lys Ser Tyr Pro Gly Ala Val Leu Ala Val Thr
65 70 75 80
His Asp Arg Tyr Phe Leu Asp His Val Ala Glu Trp Ile Cys Glu Val
85 90 95
Asp Arg Gly Gln Leu His Pro Tyr Glu Gly Asn Tyr Ser Thr Tyr Leu
100 105 110
Asp Thr Lys Arg Lys Arg Leu Gln Ile Glu Gly Lys Lys Asp Ala Lys
115 120 125
Arg Ala Lys Ile Leu Glu

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130

<210> 991
 <211> 359
 <212> DNA
 <213> Homo sapiens

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 120
 gcccaatttt taggagtaga tggttattgg ttaacgacgg ggaatactga agattctttt
 180
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 359

<210> 992
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 992
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 Lys Met Ser Gln Pro Ala Tyr Gln Ala Leu Glu Ser Gly Lys Asn Leu
 20 25 30
 Lys Ser Ala Phe Leu Pro Leu Ile Ala Gln Phe Leu Gly Val Asp Gly
 35 40 45
 Tyr Trp Leu Thr Thr Gly Asn Thr Glu Asp Ser Phe Arg Glu Ser Asp
 50 55 60
 Val Phe Ser Pro Thr Val Val Ser Ala Glu Ser Thr Asp Gln Tyr Val
 65 70 75 80
 Trp Ile Glu Val Val Glu Ala Asn Phe Ser Cys Gly Thr Gly Glu Ser
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 Ile Glu Phe His Phe Asp Ala Ile Asn Gly Lys Ile Pro Phe Pro Ala
 100 105 110
 Ser Phe Phe Lys Glu Lys Arg
 115

<210> 993
 <211> 450
 <212> DNA
 <213> Homo sapiens

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<210> 994

<211> 110

<212> PRT

<213> Homo sapiens

<400> 994

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Glu	Ile	Pro	Ala	Gln	Gly	Arg	Thr	Ser	Cys	Tyr	Asp	Arg	Cys	Met	Ile
		20					25				30				
Tyr	Leu	Ser	Gln	Asp	Tyr	Ile	Gly	Glu	Leu	Pro	Lys	Gln	His	Ile	Ser
	35					40					45				
Leu	Gly	Lys	Phe	Asp	Pro	Asp	Asn	Ile	Pro	Ala	Asp	Pro	Asn	Glu	Leu
	50				55				60						
Phe	Ala	Thr	Trp	Phe	Lys	Glu	Ala	Val	Glu	Asn	Glu	Val	Gly	Asp	Pro
65			70				75							80	
Thr	Ala	Val	Thr	Val	Ala	Thr	Val	Asp	Asp	Asn	Gly	Gln	Pro	Asp	Ala
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<210> 995

<211> 924

<212> DNA

<213> Homo sapiens

<400> 995

cgaggactgg tggaccagga cgtgcagcct gcccgctacc acatgcctt tgggcccgtg
 60
 gtggatggcg acgtgggtccc cgtgaccctc gagatcctca tgcagcaggg agaattcctc
 120
 aactacgaca tgctcatcgg cgtcaaccag ggagaggggc tcaagtctgt ggaggactct
 180
 gcagagagcg aggacggtgt gtctgcagc gcctttgact tcaactgtctc caactttgtg
 240
 gacaacctgt atggctaccc ggaaggcaag gatgtgtcttc gggagaccat caagtttatg
 300
 tacacagact gggccgaccg ggacaatggc gaaatgcgcc gcaaaacctc gctggcgctc
 360
 tttactgacc accaatgggt ggcaccagct gtggcoactg ccaagtgcga cgccgactac
 420

cagtctcccg tctactttta cacctttctac caccactgcc aggcggagggg ccggcctgag
 480
 tgggcagatg cggcgcacgg ggatgaactg ccttatgtct ttggcgtgcc catgggtggg
 540
 gccaccgacc tcttccctcg taactttctcc aagaatgacg tcatgctcag tggcgtgggc
 600
 atgacctact ggaccaactt cgccaagact ggggacccca accagccggg gccgcaggat
 660
 accaagttea tccacaccaa gcccaatgcg ttcgaggagg tgggtgtggag caaatcaac
 720
 agcaaggaga agcagtatct gcacatagcg ctgaagccac gcgtgcgtga caactaccgc
 780
 gccacaagg tggccttctg gctggagctc gtgcccacc tgacaaacct gcacacggag
 840
 ctcttcacca ccaccacgag cctgcctccc tacgccacgc gctggccgcc tcgtccccc
 900
 gctggcgccc cgggcacacg ccgg
 924

<210> 996

<211> 308

<212> PRT

<213> Homo sapiens

<400> 996

Arg	Glu	Leu	Val	Asp	Gln	Asp	Val	Gln	Pro	Ala	Arg	Tyr	His	Ile	Ala
1				5					10					15	
Phe	Gly	Pro	Val	Val	Asp	Gly	Asp	Val	Val	Pro	Asp	Asp	Pro	Glu	Ile
			20					25					30		
Leu	Met	Gln	Gln	Gly	Glu	Phe	Leu	Asn	Tyr	Asp	Met	Leu	Ile	Gly	Val
		35					40					45			
Asn	Gln	Gly	Glu	Gly	Leu	Lys	Phe	Val	Glu	Asp	Ser	Ala	Glu	Ser	Glu
	50					55				60					
Asp	Gly	Val	Ser	Ala	Ser	Ala	Phe	Asp	Phe	Thr	Val	Ser	Asn	Phe	Val
	65				70				75					80	
Asp	Asn	Leu	Tyr	Gly	Tyr	Pro	Glu	Gly	Lys	Asp	Val	Leu	Arg	Glu	Thr
			85						90					95	
Ile	Lys	Phe	Met	Tyr	Thr	Asp	Trp	Ala	Asp	Arg	Asp	Asn	Gly	Glu	Met
			100					105					110		
Arg	Arg	Lys	Thr	Leu	Leu	Ala	Leu	Phe	Thr	Asp	His	Gln	Trp	Val	Ala
		115					120					125			
Pro	Ala	Val	Ala	Thr	Ala	Lys	Leu	His	Ala	Asp	Tyr	Gln	Ser	Pro	Val
		130				135					140				
Tyr	Phe	Tyr	Thr	Phe	Tyr	His	His	Cys	Gln	Ala	Glu	Gly	Arg	Pro	Glu
	145				150					155				160	
Trp	Ala	Asp	Ala	Ala	His	Gly	Asp	Glu	Leu	Pro	Tyr	Val	Phe	Gly	Val
			165					170						175	
Pro	Met	Val	Gly	Ala	Thr	Asp	Leu	Phe	Pro	Cys	Asn	Phe	Ser	Lys	Asn
		180					185					190			
Asp	Val	Met	Leu	Ser	Ala	Val	Val	Met	Thr	Tyr	Trp	Thr	Asn	Phe	Ala
		195					200					205			
Lys	Thr	Gly	Asp	Pro	Asn	Gln	Pro	Val	Pro	Gln	Asp	Thr	Lys	Phe	Ile
	210					215					220				
His	Thr	Lys	Pro	Asn	Arg	Phe	Glu	Glu	Val	Val	Trp	Ser	Lys	Phe	Asn

```

225          230          235          240
Ser Lys Glu Lys Gln Tyr Leu His Ile Gly Leu Lys Pro Arg Val Arg
          245          250          255
Asp Asn Tyr Arg Ala Asn Lys Val Ala Phe Trp Leu Glu Leu Val Pro
          260          265          270
His Leu His Asn Leu His Thr Glu Leu Phe Thr Thr Thr Arg Leu
          275          280          285
Pro Pro Tyr Ala Thr Arg Trp Pro Pro Arg Pro Pro Ala Gly Ala Pro
          290          295          300
Gly Thr Arg Arg
305

<210> 997
<211> 320
<212> DNA
<213> Homo sapiens

<400> 997
aaatttaata ccatagcctt ctcttggttg atccttctag gcatgagtta tggcattaaa
60
acgggcatcc atcttggtgt cgatategta cttaatgccg tgcctaaacg agtatcaaga
120
gccttgctct tggtcggtgc ctttgccgct attatgtacg gtctcattct acttgattct
180
acctgggttag ccttactcgg tatcgatgta cgaggtggtg ccatcgaata ttgggcgaag
240
atgttcaaaa taggtattgg tactgaagag ctctgttacc ctatctttat gcaagatatg
300
tttgatttgc gccacgcgt
320

<210> 998
<211> 106
<212> PRT
<213> Homo sapiens

<400> 998
Lys Phe Asn Thr Ile Ala Phe Ser Trp Leu Ile Leu Leu Gly Met Ser
1          5          10          15
Tyr Gly Ile Lys Thr Gly Ile His Leu Gly Val Asp Ile Val Leu Asn
          20          25          30
Ala Val Pro Lys Arg Val Ser Arg Ala Leu Ser Leu Phe Gly Ala Phe
          35          40          45
Ala Ala Ile Met Tyr Gly Leu Ile Leu Leu Asp Ser Thr Trp Leu Ala
          50          55          60
Leu Leu Gly Ile Asp Val Arg Gly Gly Ala Ile Glu Tyr Trp Ala Lys
65          70          75          80
Met Phe Lys Ile Gly Ile Gly Thr Glu Glu Leu Arg Tyr Pro Ile Phe
          85          90          95
Met Gln Asp Met Phe Asp Leu Arg Pro Arg
          100          105

<210> 999
<211> 401

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<212> DNA

<213> Homo sapiens

<400> 999

acgcgttcag gcggtttaaca atcgcgctaa gaagctgacc aaggaataatg tcggcatggg
 60
 acatctgagc aagagcttca tcgggtgttta tctctactca gaaggcaagt ttgtgaccag
 120
 caactatctc aatcgtgggt acaaggacat tctgagctat gcagacgatg ctagtctttt
 180
 gcaaaagcct ccagcagtggt cttcagatga tctggatata ggtctcttga agagggcctt
 240
 ggatgagtgg gtggctgatg ctaagaacca cattctcaat actgaaaact tcttttagcgg
 300
 gtcaaccggg ctcaacattg acagtcttcta cgtctttggg gaccaagaca tctgctggca
 360
 gttggcagct attctgaagc agagcatgaa tcgggaattg t
 401

<210> 1000

<211> 115

<212> PRT

<213> Homo sapiens

<400> 1000

Met Val His Leu Ser Lys Ser Phe Ile Gly Val Tyr Leu Tyr Ser Glu
 1 5 10 15
 Gly Lys Phe Val Thr Ser Asn Tyr Leu Asn Arg Gly Tyr Lys Asp Ile
 20 25 30
 Leu Ser Tyr Ala Asp Asp Ala Ser Leu Leu Gln Lys Pro Ala Val
 35 40 45
 Ala Ser Asp Asp Leu Asp Thr Gly Leu Leu Lys Arg Ala Leu Asp Glu
 50 55 60
 Trp Val Ala Asp Ala Lys Asn His Ile Leu Asn Thr Glu Asn Phe Phe
 65 70 75 80
 Ser Gly Ser Thr Gly Leu Asn Ile Asp Ser Phe Tyr Val Phe Gly Asp
 85 90 95
 Gln Asp Ile Cys Trp Gln Leu Ala Ala Ile Leu Lys Gln Ser Met Asn
 100 105 110
 Arg Glu Leu
 115

<210> 1001

<211> 351

<212> DNA

<213> Homo sapiens

<400> 1001

cgcggtattg caatgcgcct ggtgccgaat gctaaacctg ctcttgattg cccggtactg
 60
 ttcccttatg cccctaatagc ggtgattgtt ggcttccttg ccactaccgt tgggtcaatt
 120
 atcgggtatga ttgtcttccc gctgtttggg ctggcgatga tccttccggg tctgctaact
 180

aactctcttcg ctgggtgggc cgcctggagtc ttgggcaacg cgtggggagg acgtaaaggg
 240
 gcaattattg gcggcgtagt gcacgggctg ttatcaccc tgtaccagc gatgctaac
 300
 cccctactgg aaaccttcgg cttcaaaggc gtcacctca gtgattccga t
 351

<210> 1002

<211> 117

<212> PRT

<213> Homo sapiens

<400> 1002

Arg	Gly	Ile	Ala	Met	Arg	Leu	Val	Pro	Asn	Ala	Lys	Pro	Ala	Leu	Asp
1				5					10					15	
Cys	Pro	Val	Leu	Phe	Pro	Tyr	Ala	Pro	Asn	Ala	Val	Ile	Val	Gly	Phe
		20						25					30		
Leu	Ala	Thr	Thr	Val	Gly	Ser	Ile	Ile	Gly	Met	Ile	Val	Phe	Pro	Leu
		35				40					45				
Phe	Gly	Leu	Ala	Met	Ile	Leu	Pro	Gly	Leu	Leu	Thr	Asn	Phe	Phe	Ala
	50				55						60				
Gly	Gly	Ala	Ala	Gly	Val	Phe	Gly	Asn	Ala	Met	Gly	Gly	Arg	Lys	Gly
65				70				75					80		
Ala	Ile	Ile	Gly	Gly	Val	Val	His	Gly	Leu	Phe	Ile	Thr	Leu	Leu	Pro
			85					90					95		
Ala	Met	Leu	Ile	Pro	Leu	Leu	Glu	Thr	Phe	Gly	Phe	Lys	Gly	Val	Thr
			100					105					110		
Phe	Ser	Asp	Ser	Asp											
			115												

<210> 1003

<211> 444

<212> DNA

<213> Homo sapiens

<400> 1003

acgogtcctc ctttagtcga tcgcgaatat gataggcgaa gcgacgtgat ggtgtgacgc
 60
 acgagcactg ccccatctcc taggcttagg gttatgcaga ctcccatcga cgctacacctc
 120
 acccccgcgt ggggcacact ctccggccta aagtcgccgt tcgctgacgg gccacataaa
 180
 ctgcgcggtt tgttcgacgc cgaccctcac cgcgctgagc gctacacctt tgacgtcgcg
 240
 gattttgacg tcgattttatc gaagaacctc cttaccgacg agattcgtga cgctctctctc
 300
 gaactggctg cgcagatgcy cgtcaccgag cgtcgtgacg cgtatgtatgc cgggtgagcac
 360
 atcaacgtca ccgaggaccg cgcgcgtctcc cataccgcgc tgtgtcgtcc ccgcactgac
 420
 gagctgcatg ttgacgggtca ggat
 444

<210> 1004

<211> 117

<212> PRT

<213> Homo sapiens

<400> 1004

```

Met Gln Thr  Pro Ile Asp  Ala Thr Ser  Thr Pro  Ala Trp Gly Thr Leu
 1              5              10              15
Ser Gly Leu  Lys Ser Arg  Phe Ala Asp  Gly Pro  His Lys Leu Arg Arg
      20              25              30
Leu Phe Asp  Ala Asp Pro  His Arg Ala  Glu Arg Tyr Thr Phe Asp Val
      35              40              45
Ala Asp Leu  His Val Asp  Leu Ser Lys  Asn Leu Leu Thr Asp Glu Ile
      50              55              60
Arg Asp Ala  Leu Leu Glu  Leu Ala Ala  Gln Met Arg  Val Thr Glu Arg
65              70              75              80
Arg Asp Ala  Met Tyr Ala  Gly Glu His  Ile Asn Val  Thr Glu Asp Arg
      85              90              95
Ala Val Leu  His Thr Ala  Leu Cys Arg  Pro Arg Thr  Asp Glu Leu His
      100             105             110
Val Asp Gly  Gln Asp
      115

```

<210> 1005

<211> 299

<212> DNA

<213> Homo sapiens

<400> 1005

```

ccatggccat tcctctgggtg actgcaccca gtccgatgga tttaaacacc cccaatgtgc
60
tggtgactcc caagtttaca cctccagcca gggcttctct cctgggtttg cataccacc
120
tatctatctg ccttagccac tcgtgtctga cgagcacctc acacctccag aggcctctca
180
tttcttccca tgcttcttc tccacacctic ctccctctca catgagggga acttcacctc
240
cccagttgct caggcccaa acctcatca gttttgactc ttctctcgca cactactcg
299

```

<210> 1006

<211> 99

<212> PRT

<213> Homo sapiens

<400> 1006

```

Met Ala Ile  Pro Leu Val Thr Ala Ser  Ser Pro Met Asp Leu Asn Thr
 1              5              10              15
Pro Asn Val  Leu Val Thr Pro Lys Phe Thr Pro Pro Ala Arg Ala Ser
      20              25              30
Leu Leu Gly  Leu His Thr His Leu Ser  Ile Cys Leu Ser His Ser Cys
      35              40              45
Leu Thr Ser  Thr Ser His Leu Gln Arg  Leu Leu Ile Ser Ser His Ala
      50              55              60
Cys Phe Ser  His Thr Pro Pro Ser His Met Arg Ala Thr Ser Ser Ser

```

Gln Leu Leu Arg Pro Gln Thr Ser Ile Ser Phe Asp Ser Ser Leu Ala
His Tyr Ser

```
<210> 1007
<211> 389
<212> DNA
<213> Homo sapiens
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```

400> 1007
gccggcgcgca agatctaaag agctggaaa gcaaccgcaa gagagcgggg tttctgcctg
60
atgagcgcgcc tttcatggac tccattcttc gcccgggggc tgggtgtgac gtctctgaaa
120
tcaacgacgc caccgaggca cccagagggt tgacgttgag tgatggcgca cgacagggca
180
acgcggcgagc aatcggtgac ttcttcgc atgaaggact caagcgcgtc gcggcgagcc
240
tcgaggttcc ggcgagggat ccgaaatgga tcgacgttca acgtctattc cgcgagaacg
300
aagaagggcc gtacagctgg tacacctggc gcgggcaggc ttttgacacg gccgctggat
360
ggcgtaaata cgtccatgcc gcgacaacg
389

```

```
<210> 1008
<211> 105
<212> PRT
<213> Homo sapiens
```

```

400> 1008
Met Asp Ser Ser Ile Phe Gly Pro Gly Pro Gly Val Thr Val Ser Glu Ile.
 1          5          10          15
Asn Asp Ala Thr Glu Ala Pro Arg Gly Val Thr Leu Ser Asp Gly Arg
 20          25          30
Arg Gln Gly Asn Ala Gly Ala Ile Gly Asp Phe Phe Ala Ser Lys Asp
 35          40          45
Tyr Lys Pro Ser Ala Ala Ser Leu Arg Gly Pro Ala Arg Asp Pro Lys
 50          55          60
Trp Ile Asp Val Gln Arg Ser Phe His Glu Asn Glu Glu Gly Pro Tyr
 65          70          75          80
Ser Trp Tyr Thr Trp Arg Gly Gln Ala Phe Asp Thr Gly Ala Gly Trp
 85          90          95
Arg Lys Tyr Val His Ala Ala Thr Thr
 100          105

```

```
<210> 1009
<211> 324
<212> DNA
<213> Homo sapiens
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<400> 1009

ngccttcctg gctgntatgc ctggcctcat ccccatccct ggcacccctg acgatagcca
 60
 cattccactg gtgtttccccc aggaaagcca accctacctg catctcagca gagcttccac
 120
 ggagttggaa ccccgctccg agaggggtgtg ggctcagggg ccaggggtca cacaaactcc
 180
 agaaggagga cgtagtgtgt ttgcaaggct gtcctttgcc ctggttgaat aacctcgggt
 240
 ctgccccgag aggaacgtgg gcattaggct gcacccgcag gaagccatgt attttctgag
 300
 aaacttgccc catggtgcag atct
 324

<210> 1010

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1010

Met	Gly	Gln	Val	Ser	Gln	Lys	Ile	His	Gly	Phe	Leu	Arg	Val	Gln	Pro
1				5					10				15		
Asn	Ala	His	Val	Pro	Leu	Gly	Ala	Asp	Arg	Arg	Leu	Phe	Asn	Gln	Gly
		20						25				30			
Lys	Gly	Gln	Pro	Cys	Lys	Pro	Thr	Thr	Ser	Ser	Phe	Trp	Ser	Leu	Cys
		35					40				45				
Asp	Pro	Trp	Pro	Leu	Ser	Pro	His	Pro	Leu	Gly	Ala	Gly	Phe	Gln	Leu
		50				55				60					
Arg	Gly	Ser	Ser	Ala	Glu	Met	Gln	Val	Gly	Leu	Ala	Phe	Leu	Gly	Lys
65				70					75					80	
His	Gln	Trp	Asn	Val	Ala	Ile	Val	Thr	Gly	Ala	Arg	Asp	Gly	Asp	Glu
			85					90					95		
Ala	Arg	His	Xaa	Ser	His	Glu	Gly								
						100									

<210> 1011

<211> 330

<212> DNA

<213> Homo sapiens

<400> 1011

ctgcagaaaa ggaggggggt cccatgcca ggcagaactg tctgggacag acgctgcccc
 60
 gatccctgcg gctcgctgca ctctggacca cgagctctga gagcagcagg ttgagggccg
 120
 gtgggcagca gctcggaggc tccgcgaggt gcaggagacg caggcatggc cgggtgagctg
 180
 actctgagg aggaggccca gtacaaaaag gctttctccg cgggtgacac ggatggaaac
 240
 ggcaccatca atgccagga gctggggcgc gcgctgaagg ccacggggcaa gaacctctcg
 300
 gagggccagc taaagaaact catctccgag
 330

<210> 1012

<211> 55
 <212> PRT
 <213> Homo sapiens

<400> 1012
 Met Ala Gly Glu Leu Thr Pro Glu Glu Glu Ala Gln Tyr Lys Lys Ala
 1 5 10 15
 Phe Ser Ala Val Asp Thr Asp Gly Asn Gly Thr Ile Asn Ala Gln Glu
 20 25 30
 Leu Gly Ala Ala Leu Lys Ala Thr Gly Lys Asn Leu Ser Glu Ala Gln
 35 40 45
 Leu Lys Lys Leu Ile Ser Glu
 50 55

<210> 1013
 <211> 432
 <212> DNA
 <213> Homo sapiens

<400> 1013
 naattgcaca tctgtggtggc gtcgtgcgt ggcgcactga caatgtgact ggcgcattcg
 60
 tggcggcgctc tctctgtcgc cgggagcggc gaggaaggat taacgatgac cagcgacgtc
 120
 cccgggattg gctcgaacgc cgccactttg gcgcgttccc aggcctgcag tgacaaggctc
 180
 gaggtgatt tggcgggtcca tcccacaag tggcgcattc tgggggggga cgtctact
 240
 ggcagcctgc acatcgggtca ctacttcggg tgcgtggcga atcgggtacg cgtgcagaac
 300
 aagggcattg agtctttcct tgcgtgcgt gactaccagg ttatctatga ccgcgggggg
 360
 ggtggtgacc tgcaggccaa tgttatgtcg aatgtcgccg attacctggc aatcggcatt
 420
 gacccaacgc gt
 432

<210> 1014
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 1014
 Met Thr Ser Asp Val Pro Gly Ile Gly Ser Asn Ala Ala Thr Leu Ala
 1 5 10 15
 Arg Ser Gln Ala Arg Ser Asp Lys Val Glu Ala Asp Leu Ala Val His
 20 25 30
 Pro Asp Lys Trp Arg Ile Leu Gly Gly Asp Arg Pro Thr Gly Ser Leu
 35 40 45
 His Ile Gly His Tyr Phe Gly Ser Leu Ala Asn Arg Val Arg Val Gln
 50 55 60
 Asn Lys Gly Ile Glu Ser Phe Leu Val Val Ala Asp Tyr Gln Val Ile
 65 70 75 80
 Tyr Asp Arg Gly Gly Gly Gly Asp Leu Gln Ala Asn Val Met Ser Asn

```

      85              90              95
Val Ala Asp Tyr Leu Ala Ile Gly Ile Asp Pro Thr Arg
      100              105

<210> 1015
<211> 467
<212> DNA
<213> Homo sapiens

<400> 1015
nngaattcga tggctgtgaa aggtcgagct cttagtgtt ttcatatccc ctgtgtgggt
60
gaaaaacttcc cgatgaaagc gcgcacggtt gaagagctga aagaattgga aagagtttta
120
cagcaaaaaga agattgaagc agagtgtctt aaactacgga aggaattgt agaggctcag
180
tctggagtta agttgattaa acagcgtcat gaagaggatg atgaagaaga ggaagaggaa
240
gacaagacag taaaatatag caatttgcgc aattacctgt ttggtagtct gagtactgat
300
tttggggtag atacctcttt attgtcaagc caattggagc ttcattccag agaagagaaa
360
atcaacccaa ttatattatt gaaagatatt attacaagg taaaactgt tttcaataat
420
gagtttgacg ctgcatataa acaaaaagag ttgaaattg cgcgcgt
467

<210> 1016
<211> 155
<212> PRT
<213> Homo sapiens

<400> 1016
Xaa Asn Ser Met Ala Val Lys Gly Arg Ala Leu Lys Cys Phe His Ile
1      5      10      15
Pro Cys Val Val Glu Asn Phe Pro Met Lys Ala Arg Thr Val Glu Glu
20     25     30
Leu Lys Glu Leu Glu Arg Val Leu Gln Gln Lys Lys Ile Glu Ala Glu
35     40     45
Cys Leu Lys Leu Arg Lys Glu Ile Val Glu Ala Gln Ser Gly Val Lys
50     55     60
Leu Ile Lys Gln Arg His Glu Glu Asp Asp Glu Glu Glu Glu Glu
65     70     75     80
Asp Lys Thr Val Lys Tyr Ser Asn Leu Pro Asn Tyr Leu Leu Gly Ser
85     90     95
Leu Ser Thr Asp Phe Gly Val Asp Thr Ser Leu Leu Ser Ser Gln Leu
100    105    110
Glu Leu His Ser Arg Glu Glu Lys Ile Asn Gln Ile Ile Leu Leu Lys
115    120    125
Asp Ile Ile Tyr Lys Val Lys Thr Val Phe Asn Asn Glu Phe Asp Ala
130    135    140
Ala Tyr Lys Gln Lys Glu Phe Glu Ile Ala Arg
145    150    155

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<210> 1017

<211> 335

<212> DNA

<213> Homo sapiens

<400> 1017

acgcgtggct ggttgggtat gtggaacat gtgcgcgcta atgagaagga tgcgaagggg
 60
 aacattaaag tgggtcgccc cggtactttt gcggaggtca tggattttcta tgcgcattat
 120
 ctgaagggtg cggttaccgc ttcccgctccg aattttattg tgcaggataa tacgggcccgt
 180
 tggcgtgttc agtcgtcgtg gccgcagccg aatcgcactg ttacttttgc gggaccccgc
 240
 ggcatgtgcc gctacggtag cagcttggcg gccgcacgc atgggaatgg tcaggctatt
 300
 ccgcaggcgg atgcacagtc tcttaaccgc gagaa
 335

<210> 1018

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1018

Met	Trp	Asn	His	Val	Arg	Ala	Asn	Glu	Lys	Asp	Ala	Lys	Gly	Asn	Ile
1				5					10				15		
Lys	Val	Gly	Arg	Pro	Gly	Tyr	Phe	Ala	Glu	Val	Met	Asp	Phe	Tyr	Ala
		20					25					30			
His	Tyr	Leu	Lys	Gly	Ala	Val	Thr	Arg	Phe	Arg	Pro	Asn	Phe	Ile	Val
		35					40					45			
Gln	Asp	Asn	Thr	Gly	Arg	Trp	Arg	Val	Gln	Ser	Ser	Trp	Pro	Gln	Pro
		50				55				60					
Asn	Arg	Thr	Val	Thr	Phe	Ala	Gly	Pro	Arg	Gly	Ile	Val	Arg	Tyr	Gly
		65			70				75					80	
Thr	Thr	Leu	Ala	Ala	Arg	Thr	His	Gly	Asn	Gly	Gln	Ala	Ile	Pro	Gln
				85					90					95	
Ala	Asp	Ala	Gln	Ser	Leu	Asn	Arg	Glu							
			100					105							

<210> 1019

<211> 454

<212> DNA

<213> Homo sapiens

<400> 1019

acgcgtgaag gggtagtcgt agtagaagtc gtccacaaac acgggccccg gcaggctccag
 60
 ctctggagcc tctctctcaa tggcgttgcc catggtgcct ggcttgggtg atgaggcggg
 120
 tgaaggcgct ggggccaggt ggtgcgggat gaagtcagcc tcggtgaaga gctctgggct
 180
 ggaggagccg ctgcctgagc cttcaggccc cagtgtgccc agggggccacc gacagagtgg
 240

cagagagcag gtgacttcct ggcactgcgg agcgaggacc cggagaagta cttcctcaat
 300
 ggtggctgga ccatccagtg gaacggggac taccaggtgg cagggaccac cttcacatac
 360
 gcacgcaggg gcaactggga gaacctcacg tccccgggtc ccaccaagga gcctgtcttg
 420
 atccagctgc tgttccagga gagcaacctt gggg
 454

<210> 1020
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 1020
 Met Ala Leu Pro Met Val Pro Gly Leu Gly Asp Glu Ala Gly Glu Gly
 1 5 10 15
 Arg Gly Ala Arg Trp Cys Gly Met Lys Ser Ala Ser Leu Lys Ser Ser
 20 25 30
 Trp Leu Glu Glu Pro Leu Pro Glu Pro Ser Gly Pro Ser Val Pro Arg
 35 40 45
 Gly His Arg Gln Ser Gly Arg Glu Gln Val Thr Ser Trp His Cys Gly
 50 55 60
 Ala Arg Thr Arg Arg Ser Thr Ser Ser Met Val Ala Gly Pro Ser Ser
 65 70 75 80
 Gly Thr Gly Thr Thr Arg Trp Gln Gly Pro Pro Ser His Thr His Ala
 85 90 95
 Gly Ala Thr Gly Arg Thr Ser Arg Pro Arg Val Pro Pro Arg Ser Leu
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 Ser Gly Ser Ser Cys Cys Ser Arg Ala Thr Leu Gly
 115 120 125

<210> 1021
 <211> 366
 <212> DNA
 <213> Homo sapiens

<400> 1021
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 gccagagatta tctgacagga ccaaaagcata taaagttgac tgaagcagga gcaaacacgc
 120
 tgggttgaggg tcaagtgtctg gggcagcagc aacaacaaac caaaaaaaag ccccttgaac
 180
 tcccttaaatg ttgcccaaag gttctggtag agaacaagtc acatgcttaa gaaggtcttt
 240
 taaagggcac tcttgagtt tcagcatttg gtccggggaa ttgcacaagg ctctgcttaa
 300
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<210> 1022

<211> 109

<212> PRT

<213> Homo sapiens

<400> 1022

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Met Lys Met Leu Glu Arg Ala Leu His Leu Ser Arg Ala Leu Cys Asn
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Ser Pro Asp Gln Met Leu Lys Leu Gln Cys Pro Leu Lys Asp Leu
      20             25             30
Leu Arg His Val Thr Cys Ser Leu Pro Glu Pro Leu Gly Asn Ile Lys
      35             40             45
Gly Val Gln Arg Ala Phe Phe Trp Phe Val Val Ala Ala Ala Pro Ala
      50             55             60
Leu Asp Pro Gln Pro Ala Cys Leu Leu Leu Gln Ser Thr Leu Tyr
 65             70             75             80
Ala Leu Val Leu Ser Asp Asn Leu Gly Ser Met Ser Ile Phe His Ala
      85             90             95
Leu Pro Leu Ser Gly Leu Gln Glu Val Thr Gln Leu
      100             105

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<210> 1023

<211> 426

<212> DNA

<213> Homo sapiens

<400> 1023

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ggcctcctga ccatacagca gaccaagttt ggcaagtccc gcatgggtgcc gctacacccc
 120
agcgtgatcg gtccgatggc agcctaccgg gccttgcgcc gccagtacgt gcctgcgaag
 180
ccgcagatga cattcttcgt gggctcgcgt ggcgtgcacc ggggtgaacc gctgggagat
 240
aggcagggtc atcgagtgtt ctgtcagctg cgcgagcaat tgggttgat cgatcgcgcc
 300
ggccatggcc gaccgcggt gcatgacctg cgccatagct tcgccgtgag acggatgatc
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 420
ggccac
 426

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<210> 1024

<211> 142

<212> PRT

<213> Homo sapiens

<400> 1024

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Ala Gly Leu Arg Val Ser Glu Ala Ile Asn Leu Ala Asp Ser Asp Ala
 1             5             10             15
Asp Leu Asp Gly Gly Ile Leu Thr Ile Gln Gln Thr Lys Phe Gly Lys
      20             25             30
Ser Arg Met Val Pro Leu His Pro Ser Val Ile Gly Pro Met Ala Ala

```



```

65              70              75              80
Gln Leu Tyr Thr Val Ala Val Ser Cys Leu Leu Leu Ala Ser Lys Phe
      85              90              95
Glu Asp Arg Glu Asp His Val Pro Lys Leu Glu Gln Ile Asn Ser Thr
      100              105              110
Arg Ile Leu Ser Ser Gln Asn Phe Thr Leu Thr Lys Lys
      115              120              125

<210> 1027
<211> 465
<212> DNA
<213> Homo sapiens

<400> 1027
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120
gtgctgggca gcctgggtgaa caccngtcct gaagcacatc atnntctggct gaaggtcatc
180
acagctaaca tcctccagct gcaggtgaag ccctcggcca atgaccagga gctgctagtc
240
aagatccccc tggacatggt ggctggattc aacacgcccc tggtaagac catcgtggag
300
ttccacatga cgactgaggc ccaagccacc atccgcatgg acaccagtgc aagtgccccc
360
accgcctggt tcctcagtgta ctgtgccacc agccatggga gcctgcgcat ccaactgctg
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465

<210> 1028
<211> 155
<212> PRT
<213> Homo sapiens

<400> 1028
Gly Pro Lys Val Ile Lys Glu Lys Leu Thr Gln Glu Leu Lys Asp His
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Asn Ala Thr Ser Ile Leu Gln Gln Leu Pro Leu Leu Lys Ala Met Arg
      20              25              30
Glu Lys Pro Ala Gly Gly Ile Pro Val Leu Gly Ser Leu Val Asn Thr
      35              40              45
Xaa Pro Glu Ala His His Xaa Trp Leu Lys Val Ile Thr Ala Asn Ile
      50              55              60
Leu Gln Leu Gln Val Lys Pro Ser Ala Asn Asp Gln Glu Leu Leu Val
65              70              75              80
Lys Ile Pro Leu Asp Met Val Ala Gly Phe Asn Thr Pro Leu Val Lys
      85              90              95
Thr Ile Val Glu Phe His Met Thr Thr Glu Ala Gln Ala Thr Ile Arg
      100              105              110
Met Asp Thr Ser Ala Ser Gly Pro Thr Arg Leu Val Leu Ser Asp Cys
      115              120              125
Ala Thr Ser His Gly Ser Leu Arg Ile Gln Leu Leu His Lys Leu Ser

```

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130          135          140
Phe Lys Leu Asn Ala Ser Ala Lys Gln Val Met
145          150          155

<210> 1029
<211> 479
<212> DNA
<213> Homo sapiens

<400> 1029
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120
tattactaac caagtgagga aaattatccc tagcagggtcc agatgacctg gtgcatgaat
180
cacaggggaga ccta aaagga tttcctcctg taaagctctt tccccaccta ttgtctactg
240
cctgaaattg ctttagcagg aaacagaatc tctcatgccca caagtgtgag taaagtttaa
300
aatgtaaatg ctctaggaaa aggcaactca tctcttaaat tctctccaag gttcacaatcc
360
tttccaaaaga ggaggctttt gtataagtca gaaggcccag tccttgaagg tcatggaaaa
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479

<210> 1030
<211> 110
<212> PRT
<213> Homo sapiens

<400> 1030
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Leu Trp His Glu Arg Phe Cys Phe Leu Leu Lys Gln Phe Gln Ala Val
20     25     30
Ala Asn Arg Trp Gly Lys Ser Phe Thr Gly Gly Asn Pro Leu Gly Ser
35     40     45
Pro Cys Asp Ser Cys Thr Arg Ser Ser Gly Pro Ala Arg Asp Asn Phe
50     55     60
Pro His Leu Val Ser Asn Asn Asn Asn Asn Tyr Thr Leu Met Ser Ser
65     70     75     80
Cys Ser Ala Arg His Leu Trp Pro Val Leu Gly Arg Gln Tyr Leu Phe
85     90     95
Glu Pro Ser His Ser Ser Val Arg Thr Val Ser Leu His Ala
100    105    110

<210> 1031
<211> 322
<212> DNA
<213> Homo sapiens

<400> 1031

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 120
 atgcacggcg aaaccgatgt acccgaccgg gcattccagg cgcaagccaa cgatgtgcatt
 180
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 300
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 322

<210> 1032

<211> 107

<212> PRT

<213> Homo sapiens

<400> 1032

Xaa Ala Phe Tyr Val Ser Val Glu Leu Glu Asp Gly Lys Ser Ile Ala
 1 5 10 15
 Met Leu Pro Gln Ala Asp Gly Trp Phe Glu Val Glu Val Lys Cys Pro
 20 25 30
 Ala Gly Thr His Tyr Arg Tyr Asn Ile Asp Gly Glu Thr Asp Val Pro
 35 40 45
 Asp Pro Ala Ser Arg Ala Gln Ala Asn Asp Val His Gly Trp Ser Val
 50 55 60
 Val Val Asp Pro Leu Ala Tyr Gln Trp Arg His Pro Asn Trp Gln Gly
 65 70 75 80
 Arg Pro Trp His Glu Ala Val Ile Tyr Glu Leu His Val Gly Val Leu
 85 90 95
 Gly Gly Tyr Ala Ala Val Glu Gln Gln Leu Pro
 100 105

<210> 1033

<211> 579

<212> DNA

<213> Homo sapiens

<400> 1033

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 120
 aattcacatt caaatccatc acttttcaca taattgctgt taatatgaac gtcattgagtc
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 240
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 300
 aaggctgacc tggaagcggg ttccgcagtc gatgacgtta tcgacgtcgg cgttcaggct
 360
 ggtgacgaca cctcttacc gcgcacggcg atcaaggagg ctacgctcat caaggacgga
 420

aaagccgagc gaggaatctt tttctgcggc accgggatgg gcattggccat caccgccaac
 480
 aaggtgccag gcattcgcgc ctgcaccgcc caccactcct tctccgtaga ggggctcacc
 540
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 579

<210> 1034
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 1034
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 20 25 30
 Val Ile Asp Val Gly Val Gln Ala Gly Asp Asp Thr Leu Tyr Pro Arg
 35 40 45
 Ile Gly Ile Lys Gly Ala His Val Ile Lys Asp Gly Lys Ala Asp Arg
 50 55 60
 Gly Ile Phe Phe Cys Gly Thr Gly Met Gly Met Ala Ile Thr Ala Asn
 65 70 75 80
 Lys Val Pro Gly Ile Arg Ala Cys Thr Ala His Asp Ser Phe Ser Val
 85 90 95
 Glu Arg Leu Ile Met Ser Asn Asp Ala His Val Leu Cys Leu Gly Gln
 100 105 110
 Arg

<210> 1035
 <211> 363
 <212> DNA
 <213> Homo sapiens

<400> 1035
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 gtgtgtatan gaatgtgtgt atgtgtantg gaatgtgtgt gtgtantgga agctgtgtgc
 120
 atatgtnaat gtctgtgtgc atgtacgnga atgtgcgctg gtatggaatg tatctgtgta
 180
 tgtgtatgga ccgtttgtgt gattatgcaa tatgtccgtg tgtgcgtatg gaggctctca
 240
 gtatggcatg tgtgtgtgta tctactgtgc gtctctgtgt gtgtantgac atgcatatgt
 300
 atagaaagcg tctgcgctgt gtgcatgtgt gtcagtatcg aacgagtcgg agatgtggta
 360
 atn
 363

<210> 1036
 <211> 121
 <212> PRT

<213> Homo sapiens

<400> 1036

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Xaa Ala Cys Asn Val Cys Val Cys Met Xaa Pro Cys Leu Cys Val Cys
 1           5           10           15
Met Xaa Ile Cys Val Cys Ile Xaa Met Cys Val Cys Val Xaa Glu Cys
 20           25           30
Val Cys Val Xaa Glu Ala Val Cys Ile Cys Xaa Cys Leu Cys Ala Cys
 35           40           45
Thr Xaa Met Cys Ala Cys Met Glu Cys Ile Cys Val Cys Val Trp Thr
 50           55           60
Val Cys Val Ile Met Gln Tyr Val Arg Val Cys Val Trp Ser Val Ser
 65           70           75           80
Val Trp His Val Cys Val Tyr Leu Leu Cys Val Ser Val Cys Val Xaa
 85           90           95
Thr Cys Ile Cys Ile Glu Ser Val Cys Ala Val Cys Met Cys Val Ser
100           105           110
Ile Glu Arg Val Gly Asp Val Val Xaa
115           120

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<210> 1037

<211> 5832

<212> DNA

<213> Homo sapiens

<400> 1037

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120
gcgtatagtg ggggtgccag tgcaagctac agcgggccag gggccggtat ggggtatcagt
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240
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300
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420
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480
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720
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780
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840

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cctaagtcca gctcctccac cactactggg gagaagatca cgaagtgta cgagctggg
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1020
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5700

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<210> 1038

<211> 1485

<212> PRT

<213> Homo sapiens

<400> 1038

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Ser	Asn	Ser	Ser	Gly	Thr	Tyr	Gly	Pro	Gln	Met	Ser	Gln	Tyr	Gly	Pro
	20							25					30		
Gln	Gly	Asn	Tyr	Ser	Arg	Pro	Pro	Ala	Tyr	Ser	Gly	Val	Pro	Ser	Ala
	35					40				45					
Ser	Tyr	Ser	Gly	Pro	Gly	Pro	Gly	Met	Gly	Ile	Ser	Ala	Asn	Asn	Gln
	50					55				60					
Met	His	Gly	Gln	Gly	Pro	Ser	Gln	Pro	Cys	Gly	Ala	Val	Pro	Leu	Gly
65				70					75					80	
Arg	Met	Pro	Ser	Ala	Gly	Met	Gln	Asn	Arg	Pro	Phe	Pro	Gly	Asn	Met
				85					90					95	
Ser	Ser	Met	Thr	Pro	Ser	Ser	Pro	Gly	Met	Ser	Gln	Gln	Gly	Gly	Pro
			100					105					110		
Gly	Met	Gly	Pro	Pro	Met	Pro	Thr	Val	Asn	Arg	Lys	Ala	Gln	Glu	Ala
	115					120						125			
Ala	Ala	Ala	Val	Met	Gln	Ala	Ala	Ala	Asn	Ser	Ala	Gln	Ser	Arg	Gln
	130					135				140					
Gly	Ser	Phe	Pro	Gly	Met	Asn	Gln	Ser	Gly	Leu	Met	Ala	Ser	Ser	Ser
145				150						155				160	
Pro	Tyr	Ser	Gln	Pro	Met	Asn	Asn	Ser	Ser	Ser	Leu	Met	Asn	Thr	Gln
				165					170					175	
Ala	Pro	Pro	Tyr	Ser	Met	Ala	Pro	Ala	Met	Val	Asn	Ser	Ser	Ala	Ala
			180					185					190		
Ser	Val	Gly	Leu	Ala	Asp	Met	Met	Ser	Pro	Gly	Glu	Ser	Lys	Leu	Pro
	195					200						205			
Leu	Pro	Leu	Lys	Ala	Asp	Gly	Lys	Glu	Glu	Gly	Thr	Pro	Gln	Pro	Glu
	210					215				220					
Ser	Lys	Ser	Lys	Asp	Ser	Tyr	Ser	Ser	Gln	Gly	Ile	Ser	Gln	Pro	Pro
225				230						235				240	
Thr	Pro	Gly	Asn	Leu	Pro	Val	Pro	Ser	Pro	Met	Ser	Pro	Ser	Ser	Ala
			245						250					255	
Ser	Ile	Ser	Ser	Phe	His	Gly	Asp	Glu	Ser	Asp	Ser	Ile	Ser	Ser	Pro
			260				265					270			
Gly	Trp	Pro	Lys	Thr	Pro	Ser	Ser	Pro	Lys	Ser	Ser	Ser	Ser	Thr	Thr
	275						280					285			
Thr	Gly	Glu	Lys	Ile	Thr	Lys	Val	Tyr	Glu	Leu	Gly	Asn	Glu	Pro	Glu
	290					295					300				
Arg	Lys	Leu	Trp	Val	Asp	Arg	Tyr	Leu	Thr	Phe	Met	Glu	Glu	Arg	Gly
305				310						315				320	
Ser	Pro	Val	Ser	Ser	Leu	Pro	Ala	Val	Gly	Lys	Lys	Pro	Leu	Asp	Leu

```

          325          330          335
Phe Arg Leu Tyr Val Cys Val Lys Glu Ile Gly Gly Leu Ala Gln Val
          340          345          350
Asn Lys Asn Lys Lys Trp Arg Glu Leu Ala Thr Asn Leu Asn Val Gly
          355          360          365
Thr Ser Ser Ser Ala Ala Ser Ser Leu Lys Lys Gln Tyr Ile Gln Tyr
          370          375          380
Leu Phe Ala Phe Glu Cys Lys Ile Glu Arg Gly Glu Glu Pro Pro Pro
385          390          395          400
Glu Val Phe Ser Thr Gly Asp Thr Lys Lys Gln Pro Lys Leu Gln Pro
          405          410          415
Pro Ser Pro Ala Asn Ser Gly Ser Leu Gln Gly Pro Gln Thr Pro Gln
          420          425          430
Ser Thr Gly Ser Asn Ser Met Ala Glu Val Pro Gly Asp Leu Lys Pro
          435          440          445
Pro Thr Pro Ala Ser Thr Pro His Gly Gln Met Thr Pro Met Gln Gly
          450          455          460
Gly Arg Ser Ser Thr Ile Ser Val His Asp Pro Phe Ser Asp Val Ser
465          470          475          480
Asp Ser Ser Phe Pro Lys Arg Asn Ser Met Thr Pro Asn Ala Pro Tyr
          485          490          495
Gln Gln Gly Met Ser Met Pro Asp Val Met Gly Arg Met Pro Tyr Glu
          500          505          510
Pro Asn Lys Asp Pro Phe Gly Gly Met Arg Lys Val Pro Gly Ser Ser
          515          520          525
Glu Pro Phe Met Thr Gln Gly Gln Met Pro Asn Ser Ser Met Gln Asp
          530          535          540
Met Tyr Asn Gln Ser Pro Ser Gly Ala Met Ser Asn Leu Gly Met Gly
545          550          555          560
Gln Arg Gln Gln Phe Pro Tyr Gly Ala Ser Tyr Asp Arg Arg His Glu
          565          570          575
Pro Tyr Gly Gln Gln Tyr Pro Gly Gln Gly Pro Pro Ser Gly Gln Pro
          580          585          590
Pro Tyr Gly Gly His Gln Pro Gly Leu Tyr Pro Gln Gln Pro Asn Tyr
          595          600          605
Lys Arg His Met Asp Gly Met Tyr Gly Pro Pro Ala Lys Arg His Glu
          610          615          620
Gly Asp Met Tyr Asn Met Gln Tyr Ser Ser Gln Gln Gln Glu Met Tyr
625          630          635          640
Asn Gln Tyr Gly Gly Ser Tyr Ser Gly Pro Asp Arg Arg Pro Ile Gln
          645          650          655
Gly Gln Tyr Pro Tyr Pro Tyr Ser Arg Glu Arg Met Gln Gly Pro Gly
          660          665          670
Gln Ile Gln Thr His Gly Ile Pro Leu Gln Met Met Gly Gly Pro Leu
          675          680          685
Gln Ser Ser Ser Ser Glu Gly Pro Gln Gln Asn Met Trp Ala Ala Arg
          690          695          700
Asn Asp Met Pro Tyr Pro Tyr Gln Asn Arg Gln Gly Pro Gly Gly Pro
705          710          715          720
Thr Gln Ala Pro Pro Tyr Pro Gly Met Asn Arg Thr Asp Asp Met Met
          725          730          735
Val Pro Asp Gln Arg Ile Asn His Glu Ser Gln Trp Pro Ser His Val
          740          745          750
Ser Gln Arg Gln Pro Tyr Met Ser Ser Ser Ala Ser Met Gln Pro Ile

```

755	760	765
Thr Arg Pro Pro Gln Pro Ser Tyr Gln Thr Pro Pro Ser Leu Pro Asn		
770	775	780
His Ile Ser Arg Ala Pro Ser Pro Ala Ser Phe Gln Arg Ser Leu Glu		
785	790	795
Asn Arg Met Ser Pro Ser Lys Ser Pro Phe Leu Pro Ser Met Lys Met		800
	805	810
Gln Lys Val Met Pro Thr Val Pro Thr Ser Gln Val Thr Gly Pro Pro		815
	820	825
Pro Gln Pro Pro Pro Ile Arg Arg Glu Ile Thr Phe Pro Pro Gly Ser		830
	835	840
Val Glu Ala Ser Gln Pro Val Leu Lys Gln Arg Arg Lys Ile Thr Ser		845
	850	855
Lys Asp Ile Val Thr Pro Glu Ala Trp Arg Val Met Met Ser Leu Lys		860
	865	870
Ser Gly Leu Leu Ala Glu Ser Thr Trp Ala Leu Asp Thr Ile Asn Ile		875
	880	885
Leu Leu Tyr Asp Asp Ser Thr Val Ala Thr Phe Asn Leu Ser Gln Leu		890
	895	900
Ser Gly Phe Leu Glu Leu Leu Val Glu Tyr Phe Arg Lys Cys Leu Ile		905
	910	915
Asp Ile Phe Gly Ile Leu Met Glu Tyr Glu Val Gly Asp Pro Ser Gln		920
	925	930
Lys Ala Leu Asp His Asn Ala Ala Arg Lys Asp Asp Ser Gln Ser Leu		935
	940	945
Ala Asp Asp Ser Gly Lys Glu Glu Glu Asp Ala Glu Cys Ile Asp Asp		950
	955	960
Asp Glu Glu Asp Glu Glu Asp Glu Glu Asp Ser Glu Lys Thr Glu		965
	970	975
Ser Asp Glu Lys Ser Ser Ile Ala Leu Thr Ala Pro Asp Ala Ala Ala		980
	985	990
Asp Pro Lys Glu Lys Pro Lys Gln Ala Ser Lys Phe Asp Lys Leu Pro		995
	1000	1005
Ile Lys Ile Val Lys Lys Asn Asn Leu Phe Val Val Asp Arg Ser Asp		1010
	1015	1020
Lys Leu Gly Arg Val Gln Glu Phe Asn Ser Gly Leu Leu His Trp Gln		1025
	1030	1035
Leu Gly Gly Gly Asp Thr Thr Glu His Ile Gln Thr His Phe Glu Ser		1040
	1045	1050
Lys Met Glu Ile Pro Pro Arg Arg Arg Pro Pro Pro Leu Ser Ser		1055
	1060	1065
Ala Gly Lys Lys Lys Glu Leu Ala Gly Lys Gly Asp Ser Glu Glu Gln		1070
	1075	1080
Gln Glu Lys Ser Ile Ile Ala Thr Ile Asp Asp Val Leu Ser Ala Arg		1085
	1090	1095
Pro Gly Ala Leu Pro Glu Asp Ala Asn Pro Gly Pro Gln Thr Glu Ser		1100
	1105	1110
Ser Lys Phe Pro Phe Gly Ile Gln Gln Ala Lys Ser His Arg Asn Ile		1115
	1120	1125
Lys Leu Leu Glu Asp Glu Pro Arg Ser Arg Asp Glu Thr Pro Leu Cys		1130
	1135	1140
Thr Ile Ala His Trp Gln Asp Ser Leu Ala Lys Arg Cys Ile Cys Val		1145
	1150	1155
Ser Asn Ile Val Arg Ser Leu Ser Phe Val Pro Gly Asn Asp Ala Glu		1160
	1165	1170
	1175	1180

```

1185          1190          1195          1200
Met Ser Lys His Pro Gly Leu Val Leu Ile Leu Gly Lys Leu Ile Leu
          1205          1210          1215
Leu His His Glu His Pro Glu Arg Lys Arg Ala Pro Gln Thr Tyr Glu
          1220          1225          1230
Lys Glu Glu Asp Glu Asp Lys Gly Val Ala Cys Ser Lys Asp Glu Trp
1235          1240          1245
Trp Trp Asp Cys Leu Glu Val Leu Arg Asp Asn Thr Leu Val Thr Leu
1250          1255          1260
Ala Asn Ile Ser Gly Gln Leu Asp Leu Ser Ala Tyr Thr Glu Ser Ile
1265          1270          1275          1280
Cys Leu Pro Ile Leu Asp Gly Leu Leu His Trp Met Val Cys Pro Ser
          1285          1290          1295
Ala Glu Ala Gln Asp Pro Phe Pro Thr Val Gly Pro Asn Ser Val Pro
          1300          1305          1310
Ser Pro Gln Arg Leu Val Leu Glu Thr Leu Cys Lys Leu Ser Ile Gln
          1315          1320          1325
Asp Asn Asn Val Asp Leu Ile Leu Ala Thr Pro Pro Phe Ser Arg Gln
1330          1335          1340
Glu Lys Phe Tyr Ala Thr Leu Val Arg Tyr Val Gly Asp Arg Lys Asn
1345          1350          1355          1360
Pro Val Cys Arg Glu Met Ser Met Ala Leu Leu Ser Asn Leu Ala Gln
          1365          1370          1375
Gly Asp Ala Leu Ala Ala Arg Ala Ile Ala Val Gln Lys Gly Ser Ile
          1380          1385          1390
Gly Asn Leu Ile Ser Phe Leu Glu Asp Gly Val Thr Met Ala Gln Tyr
          1395          1400          1405
Gln Gln Ser Gln His Asn Leu Met His Met Gln Pro Pro Pro Leu Glu
          1410          1415          1420
Pro Pro Ser Val Asp Met Met Cys Arg Ala Ala Lys Ala Leu Leu Ala
1425          1430          1435          1440
Met Ala Arg Val Asp Glu Asn Arg Ser Glu Phe Leu Leu His Glu Gly
          1445          1450          1455
Arg Leu Leu Asp Ile Ser Ile Ser Ala Val Leu Asn Ser Leu Val Ala
          1460          1465          1470
Ser Val Ile Cys Asp Val Leu Phe Gln Ile Gly Gln Leu
          1475          1480          1485

```

<210> 1039

<211> 379

<212> DNA

<213> Homo sapiens

<400> 1039

```

gcaggagcca gggatgctgc tgaacatccc gcagtgcaag agacaggcct ccaccacagc
60
gaattacctt ggccctgaggt gttacgagag cacagagaga aaccaggtag agacgcgggg
120
cagaggggag agaggggagag agtgtagagag ctaaggtttc gggagaagac tttgtggaaa
180
aagttctttg ctgggtcctg caacatagcc aggattcagt gacaggtgag gaccactcca
240
gattttgtat gtattgaagg cctgaatac ttttttgaaa gagaatgaca tgagtacac
300

```

tggtcagcca cactgagag gggttggagg agggaagtac cagaggcagg gagaccagg
 360
 agaaagacct cgccatagt
 379

<210> 1040
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 1040
 Met Ala Arg Ser Phe Tyr Leu Val Ser Leu Pro Leu Val Leu Pro Ser
 1 5 10 15
 Ser Asn Pro Ser His Val Trp Leu Thr Arg Cys Thr His Val Ile Leu
 20 25 30
 Phe Gln Lys Ser Ile Gln Gly Leu Gln Tyr Ile Gln Asn Leu Glu Trp
 35 40 45
 Ser Ser Pro Val Thr Glu Ser Trp Leu Cys Cys Arg Thr Gln Pro Lys
 50 55 60
 Thr Phe Ser Thr Lys Ser Ser Pro Glu Thr Leu Ala Leu Thr Leu Ser
 65 70 75 80
 Pro Ser Leu Pro Ser Ala Pro Arg Leu Tyr Leu Val Ser Leu Cys Ala
 85 90 95
 Leu Val Thr Pro Gln Ala Lys Val Ile Pro Cys Gly Gly Gly Leu Ser
 100 105 110
 Arg Ala Leu Arg Asp Val Gln Gln His Pro Trp Leu Leu
 115 120 125

<210> 1041
 <211> 388
 <212> DNA
 <213> Homo sapiens

<400> 1041
 ttagtggccg tggaggccat cggctacatc gcgagtattg acaaggccga tatgtcaatc
 60
 gaaacggcgt acctgccgcg gctgttggtt tccttggccc tgaccatccc ggtgctcgcc
 120
 ttgtcgatga tccccgccct gcaattcccc cattggccgt tgtgggcgtt ggcgcttacc
 180
 acccggttg gtgtctgggg tgcttggccg ctgcaccacg cgcgtgggac caacctggg
 240
 caccggcgcg ccatcatgga caccctgggt tcgctcgccg tcctcacttc gtacctctgg
 300
 tcggtatgga tgctgaccac aggcggcgag cacctctacc tggaggtagc cgtccaccgt
 360
 cacgacgctg atcctggccg gcaaattt
 388

<210> 1042
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 1042

```

Leu Val Ala Val Glu Ala Ile Gly Tyr Ile Ala Ser Ile Asp Lys Ala
 1             5             10             15
Asp Met Ser Ile Glu Thr Ala Tyr Leu Pro Arg Leu Leu Val Ser Leu
 20             25             30
Ala Leu Thr Ile Pro Val Leu Ala Leu Ser Met Ile Pro Ala Leu His
 35             40             45
Phe Pro His Trp Pro Leu Trp Ala Leu Ala Leu Thr Pro Val Val
 50             55             60
Phe Trp Gly Ala Trp Pro Leu His His Ala Ala Trp Thr Asn Leu Arg
 65             70             75             80
His Gly Ala Ala Ile Met Asp Thr Leu Val Ser Leu Gly Val Leu Thr
 85             90             95
Ser Tyr Leu Trp Ser Val Trp Met Leu Thr Thr Gly Gly Glu His Leu
100             105             110
Tyr Leu Glu Val Ala Val His Arg His Asp Ala Asp Pro Gly Arg Gln
115             120             125
Ile

```

<210> 1043

<211> 555

<212> DNA

<213> Homo sapiens

<400> 1043

```

accggtgaaa ccctgacgag ccaatcggtt tccaccgttc ccggcgccaa gggcgcaaac
60
caggcggtcg cttcgggcgc tcttggggcc gaagtgcga tggtcggttg cgtgggtacc
120
gatgcctacg gcgcgcaatt acgcgacgca ttgttggttg aaggcatcga ttgccaggcc
180
gtcagcaccg tcgacggttc cagcgggtgt gcgctgatcg tggtagatga cagcagccag
240
aatgcgatcg ttatcgctgc cggtagcaat ggcgagctga ctccggccaa gttacagacc
300
tttagacagc tgctgcaggc tgccgacgtg attgtctgcc agcttgagac gccgatggac
360
actgtcggcc atgcgcctaa gcgcgggtgc gaactgggca agacgggtgat cctcaatccg
420
gcgcggccca gcggcccgct gcctgaggat tggtacgccg ccacgatta cctgattccc
480
aacgaaagcg aagcctcggc cttgagtggc gtgggtgggtg attcactgga cagcgccaag
540
gtcgctgcta cgcggt
555

```

<210> 1044

<211> 185

<212> PRT

<213> Homo sapiens

<400> 1044

```

Thr Gly Glu Thr Leu Ile Gly Gln Ser Phe Ser Thr Val Pro Gly Gly

```

```

      1           5           10           15
Lys Gly Ala Asn Gln Ala Val Ala Ser Ala Arg Leu Gly Ala Glu Val
      20           25           30
Ala Met Val Gly Cys Val Gly Thr Asp Ala Tyr Gly Ala Gln Leu Arg
      35           40           45
Asp Ala Leu Leu Val Glu Gly Ile Asp Cys Gln Ala Val Ser Thr Val
      50           55           60
Asp Gly Ser Ser Gly Val Ala Leu Ile Val Val Asp Asp Ser Ser Gln
      65           70           75           80
Asn Ala Ile Val Ile Val Ala Gly Ser Asn Gly Glu Leu Thr Pro Ala
      85           90           95
Lys Leu Gln Thr Phe Asp Ser Val Leu Gln Ala Ala Asp Val Ile Val
      100          105          110
Cys Gln Leu Glu Thr Pro Met Asp Thr Val Gly His Ala Pro Lys Arg
      115          120          125
Gly Arg Glu Leu Gly Lys Thr Val Ile Leu Asn Pro Ala Pro Ala Ser
      130          135          140
Gly Pro Leu Pro Glu Asp Trp Tyr Ala Ala Ile Asp Tyr Leu Ile Pro
      145          150          155          160
Asn Glu Ser Glu Ala Ser Ala Leu Ser Gly Val Val Val Asp Ser Leu
      165          170          175
Asp Ser Ala Lys Val Ala Ala Thr Arg
      180          185

```

<210> 1045

<211> 371

<212> DNA

<213> Homo sapiens

<400> 1045

```

ctattgccat actaccgccg cggaacacct caggacatga tcaagccaa cctcttcaat
60
cactccaaat tccccgagac gcaccttatg aatctatttc tcggcgtctg caaggccctg
120
cgcccatatg acgattacca cgcaccgccg gcagagcgca tgccaattgg gcaccgaagg
180
cagaccacca cccaggtgca aagcaacagt ggtagagcgg tcgctcatcg acgaaacgta
240
cggaagaaga cgaagagacg gacgaggaaa gacctgttat ggaatcacag aaccacatcg
300
ggcaggggcg cgagcacaaa accatatgcg catcgcgaca ttaaacagg tacgtgctgc
360
aagctcctcg g
371

```

<210> 1046

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1046

```

Leu Leu Pro Tyr Tyr Arg Arg Gly Asn Leu Gln Asp Met Ile Asn Ala
1           5           10           15
Asn Leu Phe Asn His Ser Lys Phe Pro Glu Thr His Leu Met Asn Leu

```

	20		25		30
Phe	Leu Gly Val Cys Lys Ala Leu Arg Ala Met His Asp Tyr His Ala				
	35		40		45
Pro	Pro Ala Glu Arg Met Pro Ile Gly His Arg Arg Gln Thr Thr Thr				
	50		55		60
Gln	Val Gln Ser Asn Ser Gly Arg Ala Val Ala His Arg Arg Asn Val				
	65		70		75
Arg	Lys Lys Thr Lys Arg Arg Ser Arg Lys Asp Leu Leu Trp Asn His				
		85		90	95
Arg	Thr Thr Ser Gly Arg Ala Ala Ser Thr Lys Pro Tyr Ala His Arg				
		100		105	110
Asp	Ile Lys Pro Gly Thr Cys Cys Lys Leu Leu				
	115		120		

<210> 1047

<211> 754

<212> DNA

<213> Homo sapiens

<400> 1047

natgccacga aggacctgga cgaggcgttg ccagccctgg atcggtctct gccacgccta
 60
 cgcaacctca acaagaacga agtgaccag gtacgtgcca tgcagcggcc acccccggt
 120
 gtgaaactgg tcatagaagc tgtgtgcatt atgaaaggca tcaagcccaa gaagtgacct
 180
 ggagaaaaagc caggcaccaa ggtggatgac tactgggagc ctggcaaggc gctgtgcag
 240
 gaccggggcc acttccttga gaggctcttc aagtttgaca aggacaacat tggagatgtg
 300
 gtgatcaaaag ccatccagcc gtacatcgat aatgaagagt tccagccagc caccattgcc
 360
 aaggtgtcca agggttgccc cttcatttgg ccgtgggggg gggcaatgcc caagtacccc
 420
 ttgtggcca aggccgtgga gccaagcgg caagccctgc tggaggccca ggaatgacctg
 480
 ggggtgacac agaggatcct ggatgaggca aaacagcgcc ttcgtgaggt ggaggacggc
 540
 atcgccacaa tgcaggctaa gtaccgggaa tgcattacca agaaggagga gctggagctg
 600
 aagtggtgagc agtgtagca gcgctgggc cagctggca aggtgagcgc cctcctcctg
 660
 caaggcctgc aagcggggcc gggccagaca gggggccagaa aggaccaggc cgccggtggg
 720
 tcctgggggtg gctgtccaac cccctcctg gcaa
 754

<210> 1048

<211> 251

<212> PRT

<213> Homo sapiens

<400> 1048

Xaa Ala Gln Lys Asp Leu Asp Glu Ala Leu Pro Ala Leu Asp Ala Ala

1	5	10	15
Leu Ala Ser	Leu Arg Asn Leu Asn Lys	Asn Glu Val Thr Gln Val Arg	
	20	25	30
Ala Met Gln Arg	Pro Pro Gly Val Lys Leu Val Ile Glu Ala Val		
	35	40	45
Cys Ile Met Lys Gly Ile Lys Pro Lys Lys Val Pro Gly Glu Lys Pro			
	50	55	60
Gly Thr Lys Val Asp Asp Tyr Trp Glu Pro Gly Lys Gly Leu Leu Gln			
	65	70	75
Asp Pro Gly His Phe Leu Glu Ser Leu Phe Lys Phe Asp Lys Asp Asn			
	85	90	95
Ile Gly Asp Val Val Ile Lys Ala Ile Gln Pro Tyr Ile Asp Asn Glu			
	100	105	110
Glu Phe Gln Pro Ala Thr Ile Ala Lys Val Ser Lys Gly Cys Pro Phe			
	115	120	125
Ile Trp Pro Trp Gly Gly Ala Met Pro Lys Tyr Pro Phe Val Ala Lys			
	130	135	140
Ala Val Glu Pro Lys Arg Gln Ala Leu Leu Glu Ala Gln Asp Asp Leu			
	145	150	155
Gly Val Thr Gln Arg Ile Leu Asp Glu Ala Lys Gln Arg Leu Arg Glu			
	165	170	175
Val Glu Asp Gly Ile Ala Thr Met Gln Ala Lys Tyr Arg Glu Cys Ile			
	180	185	190
Thr Lys Lys Glu Glu Leu Glu Leu Lys Cys Glu Gln Cys Glu Gln Arg			
	195	200	205
Leu Gly His Ala Gly Lys Val Arg Thr Leu Leu Leu Gln Gly Leu Gln			
	210	215	220
Ala Gly Pro Ala Gln Thr Gly Ala Arg Lys Asp Gln Gly Ala Gly Gly			
	225	230	235
Ser Trp Gly Gly Cys Pro Thr Pro Ser Leu Ala			
	245	250	

<210> 1049

<211> 558

<212> DNA

<213> Homo sapiens

<400> 1049

cgcagcaata gctgcacttg accagactgg gctttgcaat aagcgcattc ccggggctga
 60
 atgctgcaga tccttacagg ctgactgcag ggtgtttcag attctcctgg agtcacacgt
 120
 gccagcttga tttcaagaaa caactagaat aacagttttc tgataagaag tctatagcac
 180
 tttatggcctt acataatcca gagatagatg ggctggggcat gattccattt tctgtgtggg
 240
 gaaacccgact cacagagaag ttaaggagaca agtataaagt gatgaaactg tgtactgaac
 300
 ctcatgtctc ccagaactccc ggggtcccg gctttttctc gggggcgccc cattcacatt
 360
 gcaattcatg gccggggcaa atgctcacc acagagatat taagcactcc aacactccat
 420
 ccaccagggt gcagccaag gattcagaag acaatgatca ttocatcagc atgcatatg
 480

cagctaaaga aaggttttgg catgctctgc tttattgttt cacagaagat aagaaaaataa
 540
 actgcaaagt aacttaag
 558

<210> 1050
 <211> 112
 <212> PRT
 <213> Homo sapiens

<400> 1050
 Met Ile Pro Ile Phe Cys Trp Gly Asn Arg Leu Thr Glu Lys Leu Arg
 1 5 10 15
 Asp Lys Tyr Lys Val Met Lys Leu Cys Thr Glu Pro His Val Ser Gln
 20 25 30
 Thr Pro Gly Ser Pro Gly Phe Phe Ser Gly Arg Pro His Ser His Cys
 35 40 45
 Asn Ser Trp Pro Gly Gln Met Leu Thr His Arg Asp Ile Lys His Ser
 50 55 60
 Asn Thr Pro Ser Thr Arg Leu Gln Pro Lys Asp Ser Glu Asp Asn Asp
 65 70 75 80
 His Ser Ile Ser Met His Tyr Ala Ala Lys Glu Arg Phe Trp His Ala
 85 90 95
 Leu Leu Tyr Cys Phe Thr Glu Asp Lys Lys Ile Asn Cys Lys Val Thr
 100 105 110

<210> 1051
 <211> 317
 <212> DNA
 <213> Homo sapiens

<400> 1051
 gcgttgagtc gggatgtcgc attcatgcc gccgaacctt tttttgccga accggagcgt
 60
 aatccgggta atcttcgtct caatttcagt cacatcgcac cggagcgtct ggacgaaggt
 120
 ctcaagcgcc tggctgctgt catccgtcac gcacaggctg cacaagcggc ttaaggggag
 180
 ggccatgtac aaggtttatg gcgattacca gtcgggcaat tgctacaaga tcaagctgat
 240
 gctgcacctg ctggggcagg aatatcgctg gcacccgggg gacatctca aggtgacacc
 300
 gagaccccg aattttt
 317

<210> 1052
 <211> 57
 <212> PRT
 <213> Homo sapiens

<400> 1052
 Ala Leu Ser Arg Asp Val Ala Phe Met Pro Gly Glu Pro Phe Phe Ala
 1 5 10 15
 Glu Pro Glu Arg Asn Pro Gly Asn Leu Arg Leu Asn Phe Ser His Ile

```

                20                25                30
Ala Pro Glu Arg Leu Asp Glu Gly Leu Lys Arg Leu Ala Ala Val Ile
                35                40                45
Arg His Ala Gln Ala Ala Gln Ala Ala
                50                55

```

<210> 1053
 <211> 318
 <212> DNA
 <213> Homo sapiens

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<400> 1053
caattggccta cgcgatccga acggggcgcat gggctctctat gaetggcaag ccgtcgctcg
60
cggggagtggt gccctcgact atgcctacgc gatgtcgggtg aacctgacca ccgagaaccg
120
gcgtgccttg gaaacgcgacc tgetcgagcg ttatctgttg cgctcgccg aagaggggtg
180
cgccaacccg cctctgttcg agcaagcgtg gctacgctac cggcaacagc cgttccacgt
240
cgggatcttc tcaactctga ccatacggcg cgagcgcttt caaccggcca tgcaaccggc
300
ggactcnnnn ccccnenc
318

```

<210> 1054
 <211> 96
 <212> PRT
 <213> Homo sapiens

```

<400> 1054
Met Gly Leu Tyr Asp Trp Gln Ala Val Ala Arg Gly Glu Trp Ala Leu
1      5      10      15
Asp Tyr Ala Tyr Ala Met Ser Val Asn Leu Thr Thr Glu Asn Arg Arg
20     25     30
Ala Trp Glu Arg Asp Leu Leu Glu Arg Tyr Leu Trp Arg Leu Ala Glu
35     40     45
Glu Gly Val Ala Asn Pro Pro Ser Phe Glu Gln Ala Trp Leu Arg Tyr
50     55     60
Arg Gln Gln Pro Phe His Val Gly Ile Phe Ser Leu Leu Thr Ile Gly
65     70     75     80
Ala Gly Arg Phe Gln Pro Ala Met Gln Pro Ala Asp Ser Xaa Pro Xaa
85     90     95

```

<210> 1055
 <211> 391
 <212> DNA
 <213> Homo sapiens

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<400> 1055
tacaatgtat catcaaccag aaatacaatg agaaccacct gccagtctcc caaatactat
60
ctgcagccac tcatttaact ctctgggcta gctccacgtg ggccgtctga actctcttat
120

```

aagaatcacc tctctgctca ggcaccggga gcaaggggca tctgtcgctc tgcagaacgg
 180
 aggggaccag gacctgatga caccatcctg ggcccagaaa cctgggaggg taaagagaac
 240
 tgcagggggg gaagtccaag gatgggaaaa aggcctccgg ggcagagtcc tgaatgtca
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 360
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 391

<210> 1056
 <211> 83
 <212> PRT
 <213> Homo sapiens

<400> 1056
 Met Val Ser Pro Leu His Cys Ser Leu Gly Asn Arg Met Arg Pro Cys
 1 5 10 15
 Leu Ser Asn Asn Val Met Leu Phe Pro Leu Trp Cys Thr Ser Asp Ile
 20 25 30
 Ser Gly Leu Cys Pro Gly Gly Leu Phe Pro Ile Leu Gly Leu His Pro
 35 40 45
 Trp Gln Phe Ser Leu Pro Ser Gln Val Ser Gly Pro Arg Met Val Phe
 50 55 60
 Ile Arg Pro Gly Pro Leu Arg Ser Ala Glu Arg Gln Met Pro Leu Ala
 65 70 75 80
 Pro Gly Ala

<210> 1057
 <211> 341
 <212> DNA
 <213> Homo sapiens

<400> 1057
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 240
 atgcctttt cgcattctgc cgcgaccaag cgcgacgcog atggcctgtc gtttcatgaa
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 341

<210> 1058
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 1058

Glu Phe Pro Ala Arg Val Thr Pro Val Ala Glu Gln Leu Gly Val Ser
 1 5 10 15
 Leu Thr Leu His Pro Asp Asp Pro Pro Arg Pro Leu Phe Gly Leu Pro
 20 25 30
 Arg Ile Ala Ser Ser Ala Glu Asp Tyr Gln Ala Leu Phe Asp Ala Val
 35 40 45
 Pro Ser Lys Ala Asn Gly Ile Cys Leu Cys Thr Gly Ser Leu Gly Val
 50 55 60
 Arg Ala Glu Asn Asp Leu Pro Glu Met Ala Glu Arg Phe Gly Pro Arg
 65 70 75 80
 Ile Ala Phe Ala His Leu Arg Ala Thr Lys Arg Asp Ala Asp Gly Leu
 85 90 95
 Ser Phe His Glu Ser Asp His Leu Asp Gly Asp Val Asp Met Val Ala
 100 105 110

Cys

<210> 1059

<211> 372

<212> DNA

<213> Homo sapiens

<400> 1059

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 120
 gccgacatcc tgatcgacga aggtttcacc ggtatcgagg aaatcgcta cgtcccatg
 180
 cagggaactgc tggagatcga ggcgttcgac gaagacacca tcaacgagtt gcgcgcccg
 240
 gcccgcaatg cgctgctgac cgaggccatc gccaggaag agcgccctga gaccgcgcag
 300
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 360
 gtgcgtacgc gt
 372

<210> 1060

<211> 124

<212> PRT

<213> Homo sapiens

<400> 1060

Xaa Leu Thr Gly Trp Gln Ile Asn Ile Met Thr Pro Glu Glu Ser Val
 1 5 10 15
 Asn Arg Arg Glu Val Glu Arg Ser Gly Leu Arg Thr Thr Phe Met Asn
 20 25 30
 Lys Leu Asp Val Asp Glu Glu Val Ala Asp Ile Leu Ile Asp Glu Gly
 35 40 45
 Phe Thr Gly Ile Glu Glu Ile Ala Tyr Val Pro Met Gln Glu Leu Leu
 50 55 60
 Glu Ile Glu Ala Phe Asp Glu Asp Thr Ile Asn Glu Leu Arg Ala Arg

```

65              70              75              80
Ala Arg Asn Ala Leu Leu Thr Glu Ala Ile Ala Gln Glu Glu Arg Leu
              85              90              95
Glu Thr Ala Gln Asp Leu Leu Glu Leu Glu Gly Val Thr Pro Glu Leu
              100              105              110
Ala Ala Lys Leu Ala Glu Arg Gln Val Arg Thr Arg
              115              120

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<210> 1061
<211> 456
<212> DNA
<213> Homo sapiens

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<400> 1061
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120
gagaaggagg attctggagc attgtatttg gcagccggag cgggcagtgg gcgggggggtt
180
gggacacgaa gggtctcttc gacctctgtg cctcttctgc cccaagggcg agaagacggg
240
cttcgcagcg accctcgggg gtccatggag ccgcctgcct tcgccccctc gctcttccca
300
gggtctgaacc tggatgggga gaagaaattg aagtgtcttg gagacggggg ggcttaaaac
360
actagggagc ctcatcgccc agccttgggc ccactttcct ttcgatcgtg aggattccgc
420
accccgaaag cgtcttctcg gggctccggg gcgcgcg
456

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<210> 1062
<211> 125
<212> PRT
<213> Homo sapiens

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<400> 1062
Met Arg Leu Pro Ser Val Leu Ser Pro Pro Val Ser Lys Ala Leu Gln
1          5          10          15
Phe Leu Leu Pro Ile Gln Val Gln Thr Trp Glu Glu Arg Gly Gly Glu
20         25         30
Gly Arg Arg Leu His Gly Pro Arg Val Ala Ala Lys Pro Val Phe
35         40         45
Ser Pro Leu Gly Gln Lys Arg His Arg Gly Pro Lys Ser Pro Ser Cys
50         55         60
Pro Asn Pro Pro Pro Thr Ala Arg Ser Gly Cys Gln Ile Gln Cys Ser
65         70         75         80
Arg Ile Leu Leu Leu Leu Ser Ala Pro Lys His Leu Gln Pro Leu Leu
85         90         95
Gly Leu Gln Lys Gly Phe Leu Glu Gly Ala Lys Gly Thr Phe Tyr Leu
100        105        110
Ser Tyr Leu Pro Ala Gln Pro Gly Ala Met Glu Ser Arg
115        120        125

```

<210> 1063

<211> 3760

<212> DNA

<213> Homo sapiens

<400> 1063

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 120
 taaggctcta taactagtaa atatctgcat taaagaacga gttgaatgaa aattctgata
 180
 aattcctact taaagtgtat ccaagaaaaa cggaaaaaat ctaggagtta gtgatattag
 240
 attcagaaga atgagctttg taattcttaa aaattagtct cagaatagaa agggatttaa
 300
 aagtaattga gtaaaagtc atgaaatgtg accatataaa ggaatggctc taaatgtatt
 360
 aatccagaag gaagcaacag gttaaacagt aagaggtgaag aaacaaaaaa taagggaacga
 420
 gagagagaga gtgacaggga gagagagaca gagcggggaa ggagagaatg agaaggaaaa
 480
 tcaggaaaac gaggagaaac agaattaagg aggtgatact ggaatagtat cagaccattc
 540
 tgaatcaatt taagaattgc catgtctaat tcttatatgg aagatttgaa atacaaggat
 600
 attgaaagga ataacaatt ataataatg catagaaatc ctatgtaat ccaaggtcat
 660
 taatttgaag gaagacatca agaaaatgtg atctagaaat aaaggttgag attgctocat
 720
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 780
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 840
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 1140
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 1200
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 1440

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2160
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2280
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2340
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2400
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2460
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2520
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2580
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2640
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2700
cggccttact ttttcatctg tgatgcaact cctcttatct tgccacccac gacaatagca
2760
gggtcaggaa attgggcac cagggtatcat ttagatcctg cttctgatgt aagagatgat
2820
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 3660
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 3760

<210> 1064

<211> 483

<212> PRT

<213> Homo sapiens

<400> 1064

Met	Gln	Gly	His	Val	Ser	Asn	Arg	Ser	Gly	Leu	Leu	Gly	Thr	Ser	Leu
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His	Gly	Ser	Pro	Ser	Cys	Thr	Leu	Arg	Ser	Ala	Val	Lys	Ser	Arg	
			20					25				30			
Leu	Gly	Cys	Ala	Val	Ala	Gly	Ser	Phe	Thr	Ser	Thr	Trp	Asn	Phe	
		35				40					45				
Leu	Lys	Ser	Ser	Leu	Leu	Pro	Gly	Met	Gln	His	Ala	Val	Phe	Ser	Ser
		50				55					60				
Met	Gly	Met	Phe	Ser	Ala	Ser	Ser	Leu	Val	Thr	Ala	Leu	Leu	Leu	Leu
65					70				75				80		
Arg	Thr	Pro	Leu	Thr	Pro	Ser	Ser	Arg	Pro	Arg	Ala	Gly	Arg	Trp	His
			85					90					95		
Leu	Ser	Cys	Ser	Ser	Ser	Ala	Ser	Ser	Phe	Arg	Ala	Leu	Leu	Cys	Trp
		100						105					110		
Thr	Ser	Arg	Leu	Leu	Leu	Ser	Arg	Ser	Leu	Cys	Ser	Val	Ala	Arg	Ser
		115				120					125				
Ser	Ala	Ser	Ser	Arg	Leu	Ser	Tyr	Gln	Val	Lys	Leu	Gln	Met	Ala	Leu
		130				135					140				
Glu	Leu	Met	Arg	Lys	Glu	Leu	Glu	Asp	Ala	Leu	Thr	Gln	Glu	Ala	Asn
145				150					155				160		
Val	Gly	Lys	Lys	Thr	Val	Ile	Trp	Lys	Glu	Lys	Val	Glu	Met	Gln	Arg
			165					170					175		
Gln	Arg	Phe	Arg	Leu	Glu	Phe	Glu	Lys	His	Arg	Gly	Phe	Leu	Ala	Gln

[illegible]

<210> 1065

<211> 892

<212> DNA

<213> Homo sapiens

<400> 1065

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 120 tgtccagtc tggaaaggggg gaagaagaga tgaggggaag gctgtccagg ggggtgcaag
 180 gccctagaga ccacgcagag aagggactct ggccactgaa gggggccctcc catgtggctc
 240

ctgggtccct agagcagctc cagcttcttg gctcccccg tctgatgett agctcatccc
 300
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 360
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 420
 cgcaggcaac aggtccccagc aagagtcagc tagcctagct cagccctgca cacctggaga
 480
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 540
 agtgaaggtt gaggaatcat ttctctatgg cccaagacgt ttctctctgc agttgtcatg
 600
 ttagtacctg ccagcttttc ctctcttaca taaatttcat gccagagcct ggaatgtgt
 660
 gccctttgta ggaggggcat cacaggtgg ctcacctcag cagtgccagg cagagccctg
 720
 gctctcatt gcaggaggcg catgaagcgt gtctgggacc gagctgtgga gttcctggcc
 780
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 840
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 892

<210> 1066

<211> 76

<212> PRT

<213> Homo sapiens

<400> 1066

Met	Cys	Ala	Leu	Cys	Arg	Arg	Gly	Ile	Thr	Gly	Trp	Leu	Thr	Ser	Ala
1			5				10					15			
Val	Pro	Gly	Arg	Ala	Arg	Pro	Ser	His	Cys	Arg	Arg	Arg	Met	Lys	Arg
			20				25					30			
Val	Trp	Asp	Arg	Ala	Val	Glu	Phe	Leu	Ala	Ser	Asn	Glu	Ser	Arg	Ile
			35				40					45			
Gln	Thr	Glu	Ser	His	Arg	Val	Ala	Gly	Glu	Asp	Met	Leu	Val	Leu	Arg
			50				55				60				
Trp	Thr	Lys	Pro	Ser	Ser	Phe	Ser	Asp	Ser	Glu	Arg				
65					70					75					

<210> 1067

<211> 418

<212> DNA

<213> Homo sapiens

<400> 1067

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 120
 ggactagaca tctggaagc ccgagtctcc gctgacatcg aaggcgactg gactatgcac
 180
 gttgaaggct ggtcagacac ctggggcacy tggcatcaca atgccaatgc caagctcggc
 240

gctgccatcg acgtcgaaact ggtgtgcgcc gaaggccatg ccctcataaa cgaggcggtc
 300
 cggcacgcyg agcaatccgg ggatactgac gcgatcacgg ctctggcgga gaccgatgcc
 360
 aacctaacc ttgaccgtgc ccccgactcg ctacaacagg tcatcaacac ctacgcgt
 418

<210> 1068

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1068

Glu	Phe	Glu	Val	Thr	Ala	Asn	Val	Phe	Arg	Glu	Gly	His	Asp	Ala	Val
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Gly	Ala	Ser	Val	Val	Leu	Thr	Asp	Pro	Glu	Gly	Asn	Arg	His	Leu	Thr
		20					25						30		
Asp	Met	His	Gln	Val	Glu	Pro	Trp	Gly	Leu	Asp	Ile	Trp	Lys	Ala	Arg
	35					40				45					
Val	Ser	Ala	Asp	Ile	Glu	Gly	Asp	Trp	Thr	Met	His	Val	Glu	Gly	Trp
	50				55					60					
Ser	Asp	Thr	Trp	Gly	Thr	Trp	His	His	Asn	Ala	Asn	Ala	Lys	Leu	Ala
65				70					75					80	
Ala	Ala	Ile	Asp	Val	Glu	Leu	Val	Cys	Ala	Glu	Gly	His	Ala	Leu	Ile
			85					90						95	
Asn	Glu	Ala	Val	Arg	His	Ala	Glu	Gln	Ser	Gly	Asp	Thr	Asp	Ala	Ile
			100					105					110		
Thr	Ala	Leu	Arg	Glu	Thr	Asp	Ala	Asn	Leu	Thr	Leu	Asp	Arg	Ala	Pro
	115					120						125			
Asp	Ser	Leu	Gln	Gln	Val	Ile	Asn	Thr	Tyr	Ala					
	130					135									

<210> 1069

<211> 371

<212> DNA

<213> Homo sapiens

<400> 1069

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 120
 ttttctggag ctgaacatct cagggtccat gtaaggcttg gtgccagcca tgggtggagac
 180
 ctgcgttate acctgcaaca gaacgtccac ttcaaggaag aaacagtgaa gctcttcac
 240
 tgtgagctgg tcattggccct ggactacctg cagaaccagc gcattattca cagggatatg
 300
 aagcctgaca atattttact tgacgaacat gggcacgtgc acatcacaga tttaaacatt
 360
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 371

<210> 1070

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1070

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Pro Ala Ser Gln Gln Phe Ile Cys Arg His Ser Gln Gly Pro Pro Val
      20           25           30
Asn Ser Lys Gly Ile Ala Cys Ser Phe Ser Gly Ala Glu His Leu Arg
      35           40           45
Cys His Val Arg Leu Gly Ala Ser His Gly Gly Asp Leu Arg Tyr His
      50           55           60
Leu Gln Gln Asn Val His Phe Lys Glu Glu Thr Val Lys Leu Phe Ile
      65           70           75           80
Cys Glu Leu Val Met Ala Leu Asp Tyr Leu Gln Asn Gln Arg Ile Ile
      85           90           95
His Arg Asp Met Lys Pro Asp Asn Ile Leu Leu Asp Glu His Gly His
      100          105          110
Val His Ile Thr Asp Phe Asn Ile Ala Ala Met
      115          120

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<210> 1071

<211> 998

<212> DNA

<213> Homo sapiens

<400> 1071

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 120
ccaccccgaa gtacgtggcc ttggagtgcc attcgcactc cacttggcc ccgtttgcat
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 300
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 360
ggtataccta tgatgcgtgt attcacagtt aaaaagggtt ctctcatggg ccatacagct
 420
tcaaacaaag acgatcttct caaacgcgtg aaacgcacgt cggggcaaat ccaggccggt
 480
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 540
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 720
cgagattagc cacatacatg accatgtggt ccttgggtca gcacgcgaag aaaaagccaa
 780

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 840
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 998

<210> 1072
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 1072
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 20 25 30
 Ala Asp Cys Ala Lys Thr Leu His Leu Val Ala Ala Thr Arg Gly Ala
 35 40 45
 Ile Asn Gly Leu Met Asp Glu Ile Ile Glu Asp His Ala Arg Lys His
 50 55 60
 Val Ala Ser Pro Thr Leu Ser Asp
 65 70

<210> 1073
 <211> 468
 <212> DNA
 <213> Homo sapiens

<400> 1073
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 120
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 180
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 240
 attcattgtc tctctcctt cactctcgaa tagctttgcc cagacctca ggtactcctt
 300
 cctcctctgt ataataattg gttttcacct ctttatgaac tcttttgat tctcattact
 360
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 420
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<210> 1074
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 1074

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Met Asp Asn Phe Leu Phe Phe Lys Tyr Thr Leu Pro Met Ser Gln Leu
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Gly Cys Phe Ser Pro Thr Asp Lys Ile Leu Leu Leu Phe Lys Leu Leu
20           25           30
Gly Lys Phe Phe Leu Leu Gln Lys Val Leu Phe Leu His Ile Leu Arg
35           40           45
Asn His His Leu Val His Met Leu Lys Ala Glu Phe Ile Val Ser Ser
50           55           60
Pro Ser Leu Ser Asn Ser Phe Ala Gln Thr Leu Arg Tyr Ser Phe Ile
65           70           75           80
Leu Cys Ile Ile Phe Gly Phe His Leu Phe Met Asn Ser Phe Val Phe
85           90           95
Ser Leu Leu Ala Leu Glu Pro Arg Thr Tyr His Gly Phe Lys Val Cys
100          105          110
Phe Asn Glu Leu Asn Gly Ile Asn Phe Val Val Leu Met Gln Ile Gln
115          120          125
Met Pro Leu Asn Thr Asp
130

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<210> 1075

<211> 1633

<212> DNA

<213> Homo sapiens

<400> 1075

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120
gcgcctgctg atcctgcccc aggaggagga ctatggcttt gacatcgagg agaagaacaa
180
ggctgtggtg gtgaagtccg tccagagggg cttctggctg gaggtggctg gcttcagagt
240
ggggagggaag atctactcca tcaatgagga cctggtgttc ctgcggccgt ttctcagagt
300
ggagtccatc ctcaaccagt ccttctgctc ccgcgccctc ctgcgcctcc tgggtggccac
360
gaaggccaaa gagatcatca aaatccccga ccagccggac acactgtgct tccagattcg
420
tggagctgcc ccaccgtacg tctatgctgt ggggagaggg tctgaggcca tggctgcagg
480
gctctgtgct ggtcagtgca ttctgaaggt caatggcagc aacgtgatga acgtaggtgc
540
ccctgaggtc ctggagcact tccaggcatt ccggagtcgg cgcgaagagg ccctgggccc
600
gtaccagtgg atctaccaca cccatgagga tgcccaggaa gcacgagcca gtcaggaggc
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720
cccactgctg tccctgggtc ccggctgag cctgtgtgag ggcagcccca tgggtaccct
780
gactgtggac aacgtgcacc tggaaacagg cgtggtgtat gagtatgtga gcacggcagg
840

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cgtcaggtgc catgtgctgg agaagatcgt ggagccccgc ggctgcttcg gcctcaccgc
 900
 caagatcctc gaggcctttg ctgccaatga cagcgtcttc gtggagaact gcaggcggct
 960
 catggccctg agcagcgcca tcgtgacctt gccccacttt gagttccgca acatctgtga
 1020
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 1080
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 1140
 cctacttttg cccccaat tgccacatca acctcatgga agtgtcctac cccaagacca
 1200
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 1260
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 1320
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 1380
 tccatgatgg cagcttcggg ccagccagtg ggacccttgg tcaggaagac cggggcctca
 1440
 gcttctact caagcaggag gaccgtgaga tccaggatgc ctacctgcag ctcttcacca
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 1620
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 1633

<210> 1076

<211> 87

<212> PRT

<213> Homo sapiens

<400> 1076

His	Gln	Ala	Gly	Glu	His	Trp	Pro	Glu	Asp	Cys	Leu	Leu	Pro	Gly	Val
1			5					10						15	
Cys	Ser	Pro	Thr	Glu	Glu	Gln	Gly	Gln	Pro	Thr	Leu	Gln	Thr	Ser	Pro
		20					25					30			
Pro	Gly	Ala	Pro	Pro	Ala	Val	Trp	Pro	Thr	Ser	Ala	Pro	Pro	Ile	Ala
		35				40					45				
Thr	Ser	Thr	Ser	Trp	Lys	Cys	Pro	Thr	Pro	Arg	Pro	Pro	Pro	Gln	Trp
	50				55					60					
Ala	Gly	Pro	Ser	Ala	Ser	Ala	Leu	Asp	Ala	Asn	Pro	Pro	Ser	Ser	Ala
65				70				75						80	
Leu	Thr	Arg	Ser	Lys	Ala	Thr									
					85										

<210> 1077

<211> 419

<212> DNA

<213> Homo sapiens

<400> 1077

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 120
 caccagagt ttacatatcc aatttttggga gaggtgagg caatttacgg ctacaacggc
 180
 ttgcacatga atcttgcctt tgcgagcggc agcctgggtgc cgtcgctcga aatcacttac
 240
 cgcgctaaga atacgacgac gtccgctaaa gtagatgacg tggagcaggc tctgcgcgga
 300
 gtgctcccgc cagatgtcgt tactcctgca gaacttgatg ctatcgttgc acgcgacgcc
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 419

<210> 1078

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1078

Xaa	Arg	Val	Thr		Arg	Leu	Ala	Thr	Arg	Leu	His	Ser	Met	Ser	Thr	Lys
1				5						10					15	
Trp	Thr	Cys	Asn	Ala	Asn	Glu	Ala	Thr	Cys	Leu	Arg	Leu	Ala	Gly	Ala	
			20					25					30			
Pro	Ser	Pro	Ser	Asp	Ala	Leu	Phe	His	Pro	Glu	Phe	Thr	Tyr	Pro	Ile	
		35					40					45				
Phe	Gly	Glu	Ala	Glu	Ala	Ile	Tyr	Gly	Tyr	Asn	Gly	Leu	His	Met	Asn	
	50					55				60						
Leu	Ala	Phe	Ala	Ser	Gly	Ser	Leu	Val	Pro	Ser	Leu	Glu	Ile	Thr	Tyr	
65				70					75					80		
Arg	Ala	Lys	Asn	Thr	Thr	Ser	Ala	Lys	Val	Asp	Asp	Val	Glu	Gln		
			85					90					95			
Ala	Leu	Arg	Gly	Val	Leu	Pro	Pro	Asp	Val	Val	Thr	Pro	Ala	Glu	Leu	
			100					105					110			
Asp	Ala	Ile	Val	Ala	Arg	Asp	Ala	Arg	Ala	Val	Arg	Ala	His	Leu	Arg	
	115					120					125					
Arg	Arg	Ala	Pro	Arg	Leu	Arg	Arg	Thr	Leu	Ala						
	130					135										

<210> 1079

<211> 584

<212> DNA

<213> Homo sapiens

<400> 1079

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 120
 gctcaaacctg ctctcccaagc cagcaggagg gggaaacctg ctgcctgctg acctgggtag
 180
 ttctatttag gtcttctgac acaacagtgg gcaagtgat gcctctctgt accaaaagta
 240

tttacccecaa gttccccccag gccctccctt tctgtctgcaa agacacacat ctgttttcaact
 300
 gtgtcttctg caaagacaca catctgtttc actgggggtt tctgcaaaga caccattttg
 360
 tttccctctt taagggtttt cccctcccatc ttgtctattt ttaaaaaaat aaacgggggt
 420
 cccaggatag ccttccccc cagatcaaga gcccatgtga aatgaggggg cgcacttgac
 480
 cacagcacct tgttctcttc tgtaatctag acactttctg acaatagagg gccccaccct
 540
 caagggcaca ggccatgggt tgtctctcagg ctccctccac gcgt
 584

<210> 1080
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 1080
 Met Leu His Val Val Ser Ala Ser Gln Pro Trp Glu Met Tyr Pro His
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 Ala Val Ala Ser Thr Ile Gly Leu Leu Phe Leu Leu Cys Ser Asn Cys
 20 25 30
 Phe Pro Ser Gln Gln Gly Gly Glu Pro Cys Cys Leu Leu Thr Trp Val
 35 40 45
 Val Leu Phe Arg Ser Cys Asp Thr Thr Val Gly Lys Val Met Pro Ser
 50 55 60
 Val Thr Lys Ser Ile Tyr Pro Lys Phe Pro Gln Ala Leu Pro Phe Val
 65 70 75 80
 Cys Lys Asp Thr His Leu Phe His Cys Val Phe Cys Lys Asp Thr His
 85 90 95
 Leu Phe His Trp Gly Phe Leu Gln Arg His Pro Phe Val Ser Pro Phe
 100 105 110
 Lys Gly Phe Pro Leu His Leu Val Tyr Phe
 115 120

<210> 1081
 <211> 3077
 <212> DNA
 <213> Homo sapiens

<400> 1081
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 120
 tatatccaca atgggaagaa atccagggcc ttaagcccc tatctctgt ggccatagag
 180
 cagacatctc ttaagatgat gcaggcagta ggaggtgcac ctgcacgtcc cactggagaa
 240
 tatatctgta atcaatgtgg tgctaagtac acatccctag acagctttca gactcaccta
 300
 aaaactcacc tcgacactgt gcttccaaaa ttgacctgtc ctacgtgcaa caaggaaattc
 360

cccaaccaag aatccttgct gaagcatgtt accattcact ttatgatcac ttcaacgtat
420
tacatctgtg agagttgtga caagcaattc acatcagtggt atgaccttca gaaacacctg
480
ctggacatgc acacctttgt cttctttcgc tgcacctctc gccaggaagt ttttgactca
540
aaagtctcca ttacgtccca ctggctgtg aagcacagta acgaaaagaa agtctatagg
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tgacatctt gcaactggga cttccgcaac gaaactgact tgcagctcca tgtgaacacac
660
aaccacctgg aaaaccaagg gaaagtgcac aagtgcattt tctgcggtga gtcttttggc
720
accgaggtgg agctgcaatg ccacatcacc actcacagta agaagtacaa ctgcaagtcc
780
tgtagcaaaag ccttccatgc gatcattttg ttgaaaaaac acttgcgaga aaaacactgt
840
gtattcgaaa ccaagacacc caactgtgga acaaatggag cttccgagca agtcagaaaa
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1020
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1080
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1140
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1200
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1260
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1320
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1380
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1440
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1500
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1680
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1740
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1800
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1860
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1920
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1980
gcaaatacaca tgattgatga aggactgaac catgaatgca aactctgcag ccagaccttt
2040

gactctctctg ccaactcca gtgccacctg atagagcaca gcttcgaagg gatgggaggc
 2100
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 2160
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 2220
 tttttcttcc aaacagagct gcagaatcat acaatgaccc aacacagcag ttagtgcaag
 2280
 tacagtctct caaggagaat tgattttgtg gcacaaaaag ggaacatggt ttactctttg
 2340
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 2460
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 2520
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 2580
 gcttaagata aagtattttt aaggaagaaa gattaaaaac aactgttata catgagacta
 2640
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 2700
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 2760
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 2820
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 2940
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 3060
 aggaaaaaaaa aaaaaaa
 3077

<210> 1082

<211> 757

<212> PRT

<213> Homo sapiens

<400> 1082

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Ile	Phe	Asn	Ser	Val	Leu	Lys	Leu	Asn	Lys	His	Ile	Lys	Glu	Asn	His
				20				25					30		
Lys	Asn	Ile	Pro	Leu	Ala	Leu	Asn	Tyr	Ile	His	Asn	Gly	Lys	Lys	Ser
				35			40					45			
Arg	Ala	Leu	Ser	Pro	Leu	Ser	Pro	Val	Ala	Ile	Glu	Gln	Thr	Ser	Leu
				50			55				60				
Lys	Met	Met	Gln	Ala	Val	Gly	Gly	Ala	Pro	Ala	Arg	Pro	Thr	Gly	Glu
				65			70			75				80	
Tyr	Ile	Cys	Asn	Gln	Cys	Gly	Ala	Lys	Tyr	Thr	Ser	Leu	Asp	Ser	Phe

	85		90		95
Gln Thr His Leu Lys Thr His Leu Asp Thr Val Leu Pro Lys Leu Thr					
	100		105		110
Cys Pro Gln Cys Asn Lys Glu Phe Pro Asn Gln Glu Ser Leu Leu Lys					
	115		120		125
His Val Thr Ile His Phe Met Ile Thr Ser Thr Tyr Tyr Ile Cys Glu					
	130		135		140
Ser Cys Asp Lys Gln Phe Thr Ser Val Asp Asp Leu Gln Lys His Leu					
	145		150		155
Leu Asp Met His Thr Phe Val Phe Phe Arg Cys Thr Leu Cys Gln Glu					
	165		170		175
Val Phe Asp Ser Lys Val Ser Ile Gln Leu His Leu Ala Val Lys His					
	180		185		190
Ser Asn Glu Lys Lys Val Tyr Arg Cys Thr Ser Cys Asn Trp Asp Phe					
	195		200		205
Arg Asn Glu Thr Asp Leu Gln Leu His Val Lys His Asn His Leu Glu					
	210		215		220
Asn Gln Gly Lys Val His Lys Cys Ile Phe Cys Gly Glu Ser Phe Gly					
	225		230		235
Thr Glu Val Glu Leu Gln Cys His Ile Thr Thr His Ser Lys Lys Tyr					
	245		250		255
Asn Cys Lys Phe Cys Ser Lys Ala Phe His Ala Ile Ile Leu Leu Glu					
	260		265		270
Lys His Leu Arg Glu Lys His Cys Val Phe Glu Thr Lys Thr Pro Asn					
	275		280		285
Cys Gly Thr Asn Gly Ala Ser Glu Gln Val Gln Lys Glu Glu Val Glu					
	290		295		300
Leu Gln Thr Leu Leu Thr Asn Ser Gln Glu Ser His Asn Ser His Asp					
	305		310		315
Gly Ser Glu Glu Asp Val Asp Thr Ser Glu Pro Met Tyr Gly Cys Asp					
	325		330		335
Ile Cys Gly Ala Ala Tyr Thr Met Glu Thr Leu Leu Gln Asn His Gln					
	340		345		350
Leu Arg Asp His Asn Ile Arg Pro Gly Glu Ser Ala Ile Val Lys Lys					
	355		360		365
Lys Ala Glu Leu Ile Lys Gly Asn Tyr Lys Cys Ser Val Cys Ser Arg					
	370		375		380
Thr Phe Phe Ser Glu Asn Gly Leu Arg Glu His Met Gln Thr His Leu					
	385		390		395
Gly Pro Val Lys His Tyr Met Cys Pro Ile Cys Gly Glu Arg Phe Pro					
	405		410		415
Ser Leu Leu Thr Leu Thr Glu His Lys Val Thr His Ser Lys Ser Leu					
	420		425		430
Asp Thr Gly Asn Cys Arg Ile Cys Lys Met Pro Leu Gln Ser Glu Glu					
	435		440		445
Glu Phe Leu Glu His Cys Gln Met His Pro Asp Leu Arg Asn Ser Leu					
	450		455		460
Thr Gly Phe Arg Cys Val Val Cys Met Gln Thr Val Thr Ser Thr Leu					
	465		470		475
Glu Leu Lys Ile His Gly Thr Phe His Met Gln Lys Thr Gly Asn Gly					
	485		490		495
Ser Ala Val Gln Thr Thr Gly Arg Gly Gln His Val Gln Lys Leu Tyr					
	500		505		510
Lys Cys Ala Ser Cys Leu Lys Glu Phe Arg Ser Lys Gln Asp Leu Val					

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      515                      520                      525
Lys Leu Asp Ile Asn Gly Leu Pro Tyr Gly Leu Cys Ala Gly Cys Val
530                      535                      540
Asn Leu Ser Lys Ser Ala Ser Pro Gly Ile Asn Val Pro Pro Gly Thr
545                      550                      555
Asn Arg Pro Gly Leu Gly Gln Asn Glu Asn Leu Ser Ala Ile Gly Glu
565                      570                      575
Arg Gln Gly Gly Gly Thr Glu Thr Arg Cys Ser Ser Cys Asn Val Lys
580                      585                      590
Phe Glu Ser Glu Ser Glu Leu Gln Asn His Ile Gln Thr Ile His Arg
595                      600                      605
Glu Leu Val Pro Asp Ser Asn Ser Thr Gln Leu Lys Thr Pro Gln Val
610                      615                      620
Ser Pro Met Pro Arg Ile Ser Pro Ser Gln Ser Asp Glu Lys Lys Thr
625                      630                      635
Tyr Gln Cys Ile Lys Cys Gln Met Val Phe Tyr Asn Glu Trp Asp Ile
645                      650                      655
Gln Val His Val Ala Asn His Met Ile Asp Glu Gly Leu Asn His Glu
660                      665                      670
Cys Lys Leu Cys Ser Gln Thr Phe Asp Ser Pro Ala Lys Leu Gln Cys
675                      680                      685
His Leu Ile Glu His Ser Phe Glu Gly Met Gly Gly Thr Phe Lys Cys
690                      695                      700
Pro Val Cys Phe Thr Val Phe Val Gln Ala Asn Lys Leu Gln Gln His
705                      710                      715
Ile Phe Ser Ala His Gly Gln Glu Asp Lys Ile Tyr Asp Cys Thr Gln
725                      730                      735
Cys Pro Gln Lys Phe Phe Phe Gln Thr Glu Leu Gln Asn His Thr Met
740                      745                      750
Thr Gln His Ser Ser
755

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<210> 1083

<211> 516

<212> DNA

<213> Homo sapiens

<400> 1083

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naccggtgag gcacatctctgc aggggtgtccg gctagctaag cagagcggct ggaaggctcc
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120
ccactgaccc cggttctgtc ggccaattgg gatgaagagc gcagttggaa gctgcttaac
180
cgtagcgac agggcgagata caccggcctt cgtaaggctt tgacgatgcc gcctgacgac
240
gttgctctgc tggttaagga cgctaacctg cgtggcgtg gtggcgccgg gttccccacc
300
ggcatgaagt ggtccttcgt gcctaaggac aatcccaacc cgacctacct cgttgctaac
360
ggcgacgagt ctgagccggg cagctgcaag gacatgccgc tcattgatggc ctccccgcac
420
accctcgctg agggcgctcat cattgcctcc taeccatca aggccaagat ggccttcac
480

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tacatccgcg gtaggtgct gcacgtcgtc cgacgc
516

<210> 1084
<211> 142
<212> PRT
<213> Homo sapiens

<400> 1084
Ala Arg Gly Arg Gly Glu Glu Val Thr Asp Pro Leu Thr Pro Val Leu
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Ser Ala Asn Trp Asp Glu Glu Arg Ser Trp Lys Leu Leu Asn Tyr Glu
20 25 30
Arg Gln Gly Gly Tyr Thr Gly Leu Arg Lys Ala Leu Thr Met Pro Pro
35 40 45
Asp Asp Val Val Ser Leu Val Lys Asp Ala Asn Leu Arg Gly Arg Gly
50 55 60
Gly Ala Gly Phe Pro Thr Gly Met Lys Trp Ser Phe Val Pro Lys Asp
65 70 75 80
Asn Pro Asn Pro Thr Tyr Leu Val Val Asn Gly Asp Glu Ser Glu Pro
85 90 95
Gly Thr Cys Lys Asp Met Pro Leu Met Met Ala Ser Pro His Thr Leu
100 105 110
Val Glu Gly Val Ile Ile Ala Ser Tyr Ala Ile Lys Ala Lys Met Ala
115 120 125
Phe Ile Tyr Ile Arg Gly Glu Val Leu His Val Val Arg Arg
130 135 140

<210> 1085
<211> 374
<212> DNA
<213> Homo sapiens

<400> 1085
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120
atatccacaa ggttcagctc cgccaggaga ctgtcgccga tcattttcag gaagttttct
180
ttgctgcgtt cgtagtcttg gtgcaggctg aagctgtagt cgtttttgta gatgtcccg
240
tagaagaact cgggcagggt gcctttcatg gcttcacagga tgacgggttt gctcaccgc
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tgcccgtca gaacaccccg gtacaccagg gaagagcgga tcatgtcgtc ctcaaggtag
360
ggggcggcga attc
374

<210> 1086
<211> 110
<212> PRT
<213> Homo sapiens

<400> 1086

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Met Ile Arg Ser Ser Leu Val Tyr Pro Gly Val Leu Ser Gly His Gly
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Met Ser Lys Pro Val Ile Leu Glu Ala Met Lys Gly Thr Leu Pro Glu
 20             25             30
Phe Phe Tyr Arg Asp Ile Tyr Lys Ser Asp Tyr Ser Phe Asp Leu His
 35             40             45
Gln Asp Tyr Glu Arg Ser Lys Glu Asn Phe Leu Lys Met Ile Gly Asp
 50             55             60
Ser Leu Leu Ala Glu Leu Asn Leu Val Asp Ile Asp Thr Val Arg Lys
 65             70             75             80
Ile Ala Asn Ser Pro Leu Gly Ser Ser Glu Thr Leu Tyr Asp Phe Glu
 85             90             95
Arg Met Thr His Met Glu Val Trp Leu Arg Glu Asn Tyr Val
 100             105             110

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<210> 1087

<211> 423

<212> DNA

<213> Homo sapiens

<400> 1087

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nggcaccact gtgcctggcc catccaccgg agtctagggg tgcaatccac gcgccgtgca
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tcgtttctact tctacaacac tttcccgaa gtggatcggt tagcgtcggc ggtgcggggc
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ccagggaagtc atcctggacc actacaagaa tcccacgcac gcagggttga aggtccctt
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<210> 1088

<211> 88

<212> PRT

<213> Homo sapiens

<400> 1088

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Met Thr Ile Val Ala Pro Pro Pro Pro Thr Ala Gly Ala Ala Ile Ser
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Phe Leu Val Asp Gly Ile His Pro His Asp Leu Gly Gln Val Leu Asp
 20             25             30
Asp His Gly Val Ser Ile Arg Val Xaa His His Cys Ala Trp Pro Ile
 35             40             45
His Arg Ser Leu Gly Val Gln Ser Thr Ala Arg Ala Ser Phe Tyr Phe
 50             55             60
Tyr Asn Thr Phe Pro Glu Val Asp Ala Leu Ala Ser Ala Val Arg Ala

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65 Ala Arg Glu Phe Phe Gly Val His
85

75

80

<210> 1089
<211> 750
<212> DNA
<213> Homo sapiens

<400> 1089
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agagtggtaa gaatggggct cggggaagaa gccttaccct tttctctctt taatttggcg
180
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240
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360
tattcacaaa atgctagcag ttatcaccac agtgggagcc acaggagct ctgaggataa
420
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aacacagaag ggcattgtgc gagacacagc tgatcacgct agtgatgcag aggcagaccc
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<210> 1090
<211> 103
<212> PRT
<213> Homo sapiens

<400> 1090
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Cys Glu Asp Lys Thr Lys Gly Gly Arg Val Gly Gln Arg Gln Tyr Ile
20 25 30
Arg Val Val Arg Met Gly Leu Gly Glu Glu Ala Leu Pro Leu Phe Phe
35 40 45
Phe Asn Leu Ala Lys Gly Leu Leu Gly Gln Gly His Pro Ser Leu Leu
50 55 60
Leu Gly Ala Ser Ile Phe Leu His Ser Val Lys Asn Gly Gly Val Ile
65 70 75 80
Gln Lys Tyr Pro Pro Tyr Cys Gln Gly Phe Gly Glu Gly Ser Lys Lys

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      85                90                95
Lys Leu Ala Trp Glu Asn Thr
      100

<210> 1091
<211> 438
<212> DNA
<213> Homo sapiens

<400> 1091
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180
gacgagtttg ccttgtagt aggaatgggt aaagggcctt ctatttataa tcttgaacga
240
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300
cgtttaaccg agtcggatta taatatttta cggaacaac ccattcgctt ggcagataaa
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420
gactttgatc gctgcatg
438

<210> 1092
<211> 146
<212> PRT
<213> Homo sapiens

<400> 1092
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Tyr Ser Lys Ser Ala Ile Ile Thr Ala Tyr Met Asn Glu Val Tyr Leu
20     25     30
Ala Gln Val Gly Asn Glu Gly Leu His Gly Phe Ala Glu Ala Ser Gln
35     40     45
His Phe Phe Gly Arg Pro Leu Lys Glu Leu Asn Ile Asp Glu Phe Ala
50     55     60
Leu Leu Val Gly Met Val Lys Gly Pro Ser Ile Tyr Asn Pro Glu Arg
65     70     75     80
His Pro Lys Arg Ala Leu Ser Arg Arg Asn Thr Val Leu Ala Ile Leu
85     90     95
Lys Ser Gln Asp Arg Leu Thr Glu Ser Asp Tyr Asn Ile Leu Arg Lys
100    105    110
Gln Pro Ile Arg Leu Ala Asp Lys His Gln Glu Arg Ser Val Tyr Gly
115    120    125
Asp Tyr Leu Asp Leu Val Ser Met Gln Leu Ser Arg Asp Phe Asp Arg
130    135    140
Cys Met
145

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<210> 1093

<211> 351

<212> DNA

<213> Homo sapiens

<400> 1093

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 120
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 180
 gagattggcc gtctgcgtga acaaattccg caaaccaact ccgaaaccaa gatcaagaag
 240
 ctgtccaagc gtctgaagtt gatggaagcc ttccagggtt ccggcaactt gccagagtgg
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 351

<210> 1094

<211> 117

<212> PRT

<213> Homo sapiens

<400> 1094

Arg	Val	Leu	Tyr	Phe	Glu	Ser	Tyr	Val	Val	Ile	Asp	Pro	Gly	Met	Thr
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Thr	Leu	Glu	Lys	Gly	Gln	Leu	Leu	Asn	Asp	Glu	Gln	Tyr	Phe	Glu	Ala
	20							25					30		
Leu	Glu	Glu	Phe	Gly	Asp	Asp	Phe	Asp	Ala	Arg	Met	Gly	Ala	Glu	Ala
	35						40				45				
Val	Arg	Glu	Leu	Leu	His	Ala	Ile	Asp	Leu	Glu	His	Glu	Ile	Gly	Arg
	50					55				60					
Leu	Arg	Glu	Gln	Ile	Pro	Gln	Thr	Asn	Ser	Glu	Thr	Lys	Ile	Lys	Lys
65					70					75				80	
Leu	Ser	Lys	Arg	Leu	Lys	Leu	Met	Glu	Ala	Phe	Gln	Gly	Ser	Gly	Asn
			85					90						95	
Leu	Pro	Glu	Trp	Met	Val	Leu	Thr	Val	Leu	Pro	Val	Leu	Pro	Pro	Asp
			100					105						110	
Leu	Arg	Pro	Leu	Val											
			115												

<210> 1095

<211> 619

<212> DNA

<213> Homo sapiens

<400> 1095

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 120
 agccagcggc agatccgcgg ggagatcgac agcctgcgcc aggagaagga ctactgtctc
 180

aagcagcgcc tggagatcga cggcaagctg aggcagggga gtctgctgtc ccccgaggag
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 aagaatgagg ccatcacatg ccgccagcgg gtgcttcggg cctcagcctc gttgtgtgcc
 360
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 420
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 480
 cagggcacgt gtggggaggt gtctcatggc agctgctcca gcggatatcc cgtttctctc
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<210> 1096

<211> 195

<212> PRT

<213> Homo sapiens

<400> 1096

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 20 25 30
 Gln Leu Arg Gln Gly Ser Ala Gln Ser Gln Arg Gln Ile Arg Gly Glu
 35 40 45
 Ile Asp Ser Leu Arg Gln Glu Lys Asp Ser Leu Leu Lys Gln Arg Leu
 50 55 60
 Glu Ile Asp Gly Lys Leu Arg Gln Gly Ser Leu Leu Ser Pro Glu Glu
 65 70 75 80
 Glu Arg Thr Leu Phe Gln Leu Asp Glu Ala Ile Glu Ala Leu Asp Ala
 85 90 95
 Ala Ile Glu Tyr Lys Asn Glu Ala Ile Thr Cys Arg Gln Arg Val Leu
 100 105 110
 Arg Ala Ser Ala Ser Leu Leu Ser Gln Cys Glu Met Asn Leu Met Ala
 115 120 125
 Lys Leu Ser Tyr Leu Ser Ser Ser Glu Thr Arg Ala Leu Leu Cys Lys
 130 135 140
 Tyr Phe Asp Lys Val Gly Gln Gln Pro Met Ala Pro Pro Ala Pro Pro
 145 150 155 160
 His Gly Thr Cys Gly Glu Val Ser His Gly Ser Cys Ser Ser Gly Tyr
 165 170 175
 Pro Val Ser Ser Gln Thr Gly Gly Gln Asn Gln Asp Gln Leu Ile Cys
 180 185 190
 Arg Ala Ala
 195

<210> 1097

<211> 5108

<212> DNA

<213> Homo sapiens

<400> 1097
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<210> 1098

<211> 1336

<212> FRT

<213> Homo sapiens

<400> 1098

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 Ser Ser Glu Glu Ala Arg Lys Leu Met Val Arg Leu Thr Arg His Thr
 35 40 45
 Gly Arg Lys Gln Pro Pro Val Ser Glu Ser His Trp Arg Thr Leu Leu
 50 55 60
 Gln Asp Met Leu Thr Met Gln Gln Asn Val Tyr Thr Cys Leu Asp Ser
 65 70 75 80
 Asp Ala Cys Tyr Glu Ile Phe Thr Glu Ser Leu Leu Cys Ser Ser Arg
 85 90 95
 Leu Glu Asn Ile His Leu Ala Gly Gln Met Met His Cys Ser Ala Cys
 100 105 110
 Ser Glu Asn Pro Pro Ala Gly Ile Ala His Lys Gly Lys Pro His Tyr
 115 120 125
 Arg Val Ser Tyr Glu Lys Ser Ile Asp Leu Val Leu Ala Ala Ser Arg
 130 135 140
 Glu Tyr Phe Asn Ser Ser Thr Asn Leu Thr Asp Ser Cys Met Asp Leu
 145 150 155 160
 Ala Arg Cys Cys Leu Gln Leu Ile Thr Asp Arg Pro Pro Ala Ile Gln
 165 170 175
 Glu Glu Leu Asp Leu Ile Gln Ala Val Gly Cys Leu Glu Glu Phe Gly
 180 185 190
 Val Lys Ile Leu Pro Leu Gln Val Arg Leu Cys Pro Asp Arg Ile Ser
 195 200 205
 Leu Ile Lys Glu Cys Ile Ser Gln Ser Pro Thr Cys Tyr Lys Gln Ser
 210 215 220
 Thr Lys Leu Leu Gly Leu Ala Glu Leu Leu Arg Val Ala Gly Glu Asn
 225 230 235 240
 Pro Glu Glu Arg Arg Gly Gln Val Leu Ile Leu Leu Val Glu Gln Ala
 245 250 255
 Leu Arg Phe His Asp Tyr Lys Ala Ala Ser Met His Cys Gln Glu Leu
 260 265 270
 Met Ala Thr Gly Tyr Pro Lys Ser Trp Asp Val Cys Ser Gln Leu Gly

275				280				285			
Gln Ser	Glu Gly	Tyr		Gln Asp	Leu Ala	Thr Arg		Gln Glu	Leu Met	Ala	
290				295				300			
Phe Ala	Leu Thr	His	Cys	Pro Pro	Ser Ser	Ile		Glu Leu	Leu Leu	Ala	
305				310				315			
Ala Ser	Ser Ser	Ser Leu	Gln Thr	Glu Ile	Leu Tyr	Gln Arg	Val	Asn Phe			
		325			330				335		
Gln Ile	His	His	Glu Gly	Gly Glu	Asn Ile	Ser Ala	Ser	Pro Leu	Thr		
		340			345				350		
Ser Lys	Ala Val	Gln Glu	Asp Glu	Val Gly	Val Pro	Gly Ser	Asn Ser				
	355				360				365		
Ala Asp	Leu Leu	Arg Trp	Thr Thr	Thr Ala	Thr Thr	Met Lys	Val	Leu Ser			
	370				375				380		
Asn Thr	Thr Thr	Thr Thr	Lys Ala	Val Leu	Gln Ala	Val Ser	Asp Gly				
385					390				400		
Gln Trp	Trp Lys	Lys Ser	Leu Thr	Tyr Leu	Arg Pro	Leu Gln	Gly Gln				
	405				410				415		
Lys Cys	Gly Gly	Ala Tyr	Gln Ile	Gly Thr	Thr Ala	Asn Glu	Asp Leu				
	420				425				430		
Glu Lys	Gln Gly	Cys His	Pro Phe	Tyr Glu	Ser Val	Ile Ser	Asn Pro				
	435				440				445		
Phe Val	Ala Glu	Ser Glu	Gly Thr	Tyr Asp	Thr Tyr	Gln His	Val Pro				
	450				455				460		
Val Glu	Ser Phe	Ala Glu	Val Leu	Leu Arg	Thr Gly	Lys Leu	Ala Glu				
465					470				475		
Ala Lys	Asn Lys	Gly Glu	Val Phe	Pro Thr	Thr Glu	Val Leu	Leu Gln				
	485				490				495		
Leu Ala	Ser Glu	Ala Leu	Pro Asn	Asp Met	Thr Leu	Ala Leu	Ala Tyr				
	500				505				510		
Leu Leu	Ala Leu	Pro Gln	Val Leu	Asp Ala	Asn Arg	Cys Phe	Glu Lys				
	515				520				525		
Gln Ser	Pro Ser	Ala Leu	Ser Leu	Gln Leu	Ala Ala	Tyr Tyr	Tyr Ser				
	530				535				540		
Leu Gln	Ile Tyr	Ala Arg	Leu Ala	Pro Cys	Phe Arg	Asp Lys	Cys His				
545					550				555		
Pro Leu	Tyr Arg	Ala Asp	Pro Lys	Glu Leu	Ile Lys	Met Val	Thr Arg				
	565				570				575		
His Val	Thr Arg	His Glu	His Glu	Ala Trp	Pro Glu	Asp Leu	Ile Ser				
	580				585				590		
Leu Thr	Lys Gln	Leu His	Cys Tyr	Asn Glu	Arg Leu	Leu Asp	Phe Thr				
	595				600				605		
Gln Ala	Gln Ile	Leu Gln	Gly Leu	Arg Lys	Gly Val	Asp Val	Gln Arg				
	610				615				620		
Phe Thr	Ala Asp	Asp Gln	Tyr Lys	Arg Glu	Thr Ile	Leu Gly	Leu Ala				
625					630				635		
Glu Thr	Leu Glu	Glu Ser	Val Tyr	Ser Ile	Ala Ile	Ser Leu	Ala Gln				
	645				650				655		
Arg Tyr	Ser Val	Ser Arg	Trp Glu	Val Phe	Met Thr	His Leu	Glu Phe				
	660				665				670		
Pro Phe	Thr Asp	Ser Gly	Leu Ser	Thr Leu	Glu Ile	Glu Asn	Arg Ala				
	675				680				685		
Gln Asp	Leu His	Leu Phe	Glu Thr	Leu Lys	Thr Asp	Pro Glu	Ala Phe				
	690				695				700		
His Gln	His Met	Val Lys	Tyr Ile	Tyr Pro	Thr Ile	Gly Gly	Phe Asp				

205	710										715					720				
His	Glu	Arg	Leu	Gln	Tyr	Tyr	Phe	Thr	Leu	Leu	Glu	Asn	Cys	Gly	Cys					
				725					730						735					
Ala	Asp	Leu	Gly	Asn	Cys	Ala	Ile	Lys	Pro	Glu	Thr	His	Ile	Arg	Leu					
			740					745					750							
Leu	Lys	Lys	Phe	Lys	Val	Val	Ala	Ser	Gly	Leu	Asn	Tyr	Lys	Lys	Leu					
		755					760					765								
Thr	Asp	Gly	Asn	Met	Ser	Pro	Leu	Glu	Ala	Leu	Glu	Pro	Val	Leu	Ser					
		770				775					780									
Ser	Gln	Asn	Ile	Leu	Ser	Ile	Ser	Lys	Leu	Val	Pro	Lys	Ile	Pro	Glu					
				790					795					800						
Lys	Asp	Gly	Gln	Met	Leu	Ser	Pro	Ser	Ser	Leu	Tyr	Thr	Ile	Trp	Leu					
				805					810					815						
Gln	Lys	Leu	Phe	Trp	Thr	Gly	Asp	Pro	His	Leu	Ile	Lys	Gln	Val	Pro					
			820				825						830							
Gly	Ser	Ser	Pro	Glu	Trp	Leu	His	Ala	Tyr	Asp	Val	Cys	Met	Lys	Tyr					
		835					840					845								
Phe	Asp	Arg	Leu	His	Pro	Gly	Asp	Leu	Ile	Thr	Val	Val	Asp	Ala	Val					
						855				860										
Thr	Phe	Ser	Pro	Lys	Ala	Val	Thr	Lys	Leu	Ser	Val	Glu	Ala	Arg	Lys					
				870					875					880						
Glu	Met	Thr	Arg	Lys	Ala	Ile	Lys	Thr	Val	Lys	His	Phe	Ile	Glu	Lys					
				885					890					895						
Pro	Arg	Lys	Arg	Asn	Ser	Glu	Asp	Glu	Ala	Gln	Glu	Ala	Lys	Asp	Ser					
			900				905						910							
Lys	Val	Thr	Tyr	Ala	Asp	Thr	Leu	Asn	His	Leu	Glu	Lys	Ser	Leu	Ala					
		915					920					925								
His	Leu	Glu	Thr	Leu	Ser	His	Ser	Phe	Ile	Leu	Ser	Leu	Lys	Asn	Ser					
		930				935					940									
Glu	Gln	Glu	Thr	Leu	Gln	Lys	Tyr	Ser	His	Leu	Tyr	Asp	Leu	Ser	Arg					
				950					955					960						
Ser	Glu	Lys	Glu	Lys	Leu	His	Asp	Glu	Ala	Val	Ala	Ile	Cys	Leu	Asp					
			965						970					975						
Gly	Gln	Pro	Leu	Ala	Met	Ile	Gln	Gln	Leu	Leu	Glu	Val	Ala	Val	Gly					
		980					985						990							
Pro	Leu	Asp	Ile	Ser	Pro	Lys	Asp	Ile	Val	Gln	Ser	Ala	Ile	Met	Lys					
		995				1000						1005								
Ile	Ile	Ser	Ala	Leu	Ser	Gly	Gly	Ser	Ala	Asp	Leu	Gly	Gly	Pro	Arg					
	1010					1015					1020									
Asp	Pro	Leu	Lys	Val	Leu	Glu	Gly	Val	Val	Ala	Ala	Val	His	Thr	Ser					
	1025				1030					1035				1040						
Val	Asp	Lys	Gly	Glu	Glu	Leu	Val	Ser	Pro	Glu	Asp	Leu	Leu	Glu	Trp					
			1045						1050					1055						

1140 1145 1150
 Ser Glu Tyr Val Ile Thr Asn Asn Pro Trp Val Arg Leu Ala Thr Val
 1155 1160 1165
 Met Leu Thr Arg Cys Thr Met Glu Asn Lys Glu Gly Leu Gly Asn Glu
 1170 1175 1180
 Val Leu Lys Met Cys Arg Ser Leu Tyr Asn Thr Lys Gln Met Leu Pro
 1185 1190 1195 1200
 Ala Glu Gly Val Lys Glu Leu Cys Leu Leu Leu Leu Asn Gln Ser Leu
 1205 1210 1215
 Leu Leu Pro Ser Leu Lys Leu Leu Leu Glu Ser Arg Asp Glu His Leu
 1220 1225 1230
 His Glu Met Ala Leu Glu Gln Ile Thr Ala Val Thr Thr Val Asn Asp
 1235 1240 1245
 Ser Asn Cys Asp Gln Glu Leu Leu Ser Leu Leu Leu Asp Ala Lys Leu
 1250 1255 1260
 Leu Val Lys Cys Val Ser Thr Pro Phe Tyr Pro Arg Ile Val Asp His
 1265 1270 1275 1280
 Leu Leu Ala Ser Leu Gln Gln Gly Arg Trp Asp Ala Glu Glu Leu Gly
 1285 1290 1295
 Arg His Leu Arg Glu Ala Gly His Glu Ala Glu Ala Gly Ser Leu Leu
 1300 1305 1310
 Leu Ala Val Arg Gly Thr His Gln Ala Phe Arg Thr Phe Ser Thr Ala
 1315 1320 1325
 Leu Arg Ala Ala Gln His Trp Val
 1330 1335

<210> 1099

<211> 309

<212> DNA

<213> Homo sapiens

<400> 1099

acgcgtgctc tctcccgctt ggcaatcagc atggcctttt cgagctcggc ggtgcgcaat
 60
 tgaaccattt cttccagttg cgatttttca gaaagcagcg tcgattgacc ttcggtcagc
 120
 ttgcgcatat agcgcttggt gcggctggca aggatatagc cgagtatcaa tgcacctgcg
 180
 agggcgagga tcgaggcaat ggtcagccag aagcgcaact tgtccatggc tatgttcg
 240
 gcgattagcc gacgatcttc ttcaccagc aaactgttga tggttttcct gacgtcatcc
 300
 atctggcca
 309

<210> 1100

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1100

Met Asp Asp Val Arg Lys Thr Ile Asn Ser Phe Leu Gly Glu Glu Asp
 1 5 10 15
 Arg Arg Leu Ile Ala Arg Asn Ile Ala Met Asp Lys Leu Arg Phe Trp

```

      20      25      30
Leu Thr Ile Ala Ser Ile Leu Ala Leu Ala Gly Ala Leu Ile Leu Ala
      35      40      45
Tyr Ile Leu Ala Ser Arg Thr Lys Arg Tyr Val Arg Lys Leu Thr Glu
      50      55      60
Gly Gln Ser Thr Leu Leu Ser Glu Lys Ser Gln Leu Glu Glu Met Val
      65      70      75      80
Gln Leu Arg Thr Ala Glu Leu Glu Lys Ala Met Leu Ile Ala Lys Arg
      85      90      95
Glu Arg Ala Arg
      100

```

<210> 1101

<211> 540

<212> DNA

<213> Homo sapiens

<400> 1101

```

gtcgacgtta ccaactacgt catgttgag tctggtcacg cgcttcacgc ctatgatgcc
60
gacaacgtca gcgggacgat tgtggtccgt aagggccacg agggtagaca tctattgacc
120
ctcgacgaca ccgatcgac cctcgatcct gacgatetac tcacgcccga cgcactggga
180
gccattggcc tggctggcgt catgggtggt gcggccacgc aagtgcactgc tgagacgacg
240
tcaatcatcc tcgagggcgc tcaactcgac ccgatgacgg gcgctcgtgc ttaccgacgc
300
cacaagctcg gttcggagcg ctcccgccgc tttagacggg gcgttgatcc gatttcgcc
360
cataccgcag ccgttcgcgc agcggaattg ctgcgccagt acggcggtgc caccgtcggt
420
gagcccacgc tcgttggtga ggtccccgag atgccacgtc aaacgatcaa cgctgattta
480
cctaaccgga ttctcggcac gaaggtgcc actgaagagg tcacgcagat cttgacgcgt
540

```

<210> 1102

<211> 180

<212> PRT

<213> Homo sapiens

<400> 1102

```

Val Asp Val Thr Asn Tyr Val Met Leu Glu Ser Gly Gln Pro Leu His
1      5      10      15
Ala Tyr Asp Ala Asp Asn Val Ser Gly Thr Ile Val Val Arg Lys Ala
      20      25      30
His Glu Gly Glu His Leu Leu Thr Leu Asp Asp Thr Asp Arg Thr Leu
      35      40      45
Asp Pro Asp Asp Leu Val Ile Ala Asp Asp Ser Gly Ala Ile Gly Leu
      50      55      60
Ala Gly Val Met Gly Gly Ala Ala Thr Glu Val Thr Ala Glu Thr Thr
      65      70      75      80
Ser Ile Ile Leu Glu Gly Ala His Phe Asp Pro Met Thr Gly Ala Arg

```

```

      85              90              95
Ala Tyr Arg Arg His Lys Leu Gly Ser Glu Ala Ser Arg Arg Phe Glu
      100              105              110
Arg Gly Val Asp Pro Ile Cys Ala His Thr Ala Val Arg Ala Ala
      115              120              125
Glu Leu Leu Ala Gln Tyr Gly Gly Ala Thr Val Gly Glu Pro Thr Val
      130              135              140
Val Gly Glu Val Pro Glu Met Pro Arg Gln Thr Ile Asn Ala Asp Leu
      145              150              155              160
Pro Asn Arg Ile Leu Gly Thr Lys Val Pro Thr Glu Glu Val Ile Glu
      165              170              175
Ile Leu Thr Arg
      180

```

```

<210> 1103
<211> 537
<212> DNA
<213> Homo sapiens

```

```

<400> 1103
cctttctctcc aaccaggcgc tgcggcgccg gcacttgccc gacgttataa aacaattcaa
60
cgtcagggttt accatcgctg tactcaacca aatggtagcc gtatccacct tccccaccga
120
tcgcgaccca ggtgatcttt cctcggcat agattgacgt ggcattctcg tcggagtgaa
180
tcaagcagcg cttaggcagc tgctgggccc gcggtctcgc ctagtctgcc ggagcacacg
240
aacccttccc gaagataacc gccaaaggcct ggcacacctt ctgctgcacc cattccgggt
300
tgacgcccgc cgccacgcga ctggtgaaca tagccgcaat aaggagaatt gcgagtgtatt
360
ccggcgcggc ggcaccccga tcgtcccttg tccgcatggg tctccccctcc actacctacc
420
caatacaggg gagagcataa aaagaaaccc atagccgcac ctgagcccat ggcaccaaac
480
cgggggcccaa gccgggcccc aaccatggga tcaaccgat gtccgtacat caccgct
537

```

```

<210> 1104
<211> 112
<212> PRT
<213> Homo sapiens

```

```

<400> 1104
Met Tyr Gly His Pro Val Asp Pro Met Val Trp Ala Arg Leu Gly Pro
1      5      10      15
Arg Phe Gly Ala Met Gly Ser Gly Ala Ala Met Gly Phe Phe Leu Cys
      20      25      30
Ser Pro Leu Tyr Trp Val Gly Ser Gly Gly Glu Thr His Ala Asp Lys
      35      40      45
Gly Arg Ser Gly Cys Arg Arg Ala Gly Ile His Arg Asn Ser Pro Tyr
      50      55      60
Cys Gly Tyr Val His Gln Cys Gly Gly Gly Arg Arg Gln Ala Gly Met

```

```

65          70          75          80
Gly Ala Ala Glu Gly Val Pro Gly Leu Gly Gly Tyr Leu Arg Glu Gly
      85          90          95
Phe Val Cys Ser Gly Glu Leu Gly Glu Ala Ala Gly Pro Ala Ala Ala
      100          105          110

<210> 1105
<211> 448
<212> DNA
<213> Homo sapiens

<400> 1105
agggacctgg ggcagcacgt gcacgtgggt gggaggctcc ttgctaccga cagccagcca
60
tgggggtgggc cctccgagg ctgcctccag gacctcgac tcgatggctg ccaectcccc
120
ttctttcttc tgccactgga taactcaagc cagcccagcg agctcggcgg caggcagtc
180
tggaacctca ctgcgggctg cgtctccgag gacatgtgca gtcccgacc ctgtttcaat
240
ggtgggactt gectctcac ctggaatgac ttccactgta cctgccctgc caatttcacg
300
gggcctacat gtgcccagca gctgtggtgt cccggccagc cctgtctccc acctgccag
360
tgtgaggagg tccctgatgg ctttgtgtgt gtggcgagg ccacgttccg cgaggggtccc
420
ccgcgcgct tcagcgggca caacgcgt
448

<210> 1106
<211> 149
<212> PRT
<213> Homo sapiens

<400> 1106
Arg Asp Leu Gly Gln His Val His Val Gly Gly Arg Leu Leu Ala Thr
1          5          10          15
Asp Ser Gln Pro Trp Gly Gly Pro Phe Arg Gly Cys Leu Gln Asp Leu
20          25          30
Arg Leu Asp Gly Cys His Leu Pro Phe Phe Pro Leu Pro Leu Asp Asn
35          40          45
Ser Ser Gln Pro Ser Glu Leu Gly Gly Arg Gln Ser Trp Asn Leu Thr
50          55          60
Ala Gly Cys Val Ser Glu Asp Met Cys Ser Pro Asp Pro Cys Phe Asn
65          70          75          80
Gly Gly Thr Cys Leu Val Thr Trp Asn Asp Phe His Cys Thr Cys Pro
85          90          95
Ala Asn Phe Thr Gly Pro Thr Cys Ala Gln Gln Leu Trp Cys Pro Gly
100          105          110
Gln Pro Cys Leu Pro Pro Ala Thr Cys Glu Glu Val Pro Asp Gly Phe
115          120          125
Val Cys Val Ala Glu Ala Thr Phe Arg Glu Gly Pro Pro Ala Ala Phe
130          135          140
Ser Gly His Asn Ala

```

145

<210> 1107

<211> 618

<212> DNA

<213> Homo sapiens

<400> 1107

acgcgttgat gaagtacctg ccacgcttca gcaatgacgg ctcggtgaac ggctttctata
 60
 tctttgttat cgatgagacc gaacgcaaac tcaccgaaga ggccctgcgc cactcgaacg
 120
 agaacctcga agagcgcgct gccccagcgca cacaggcgct ggctgaagcc aaccaacgcc
 180
 tggcaaaaaca aaatgttcaa acgcaagcgc gccgaagacg cgctgcgtca cgcgcagaaa
 240
 atggaagcgc ggggccagct caccggcggc atcgcccatg atttcaacaa catgctgacc
 300
 gggattatcg gcagcctgga cttgatgcag cgctacatcn agggccgggagc cagcgacgaa
 360
 atcgcccgnc ttaactgacgc cgccgtatcg tccgcccata cgcgcggcgc cctcacccat
 420
 cggtcgtcgg cgttctcgcg ccgccagtcg ctggccccc gcccgctgga cccaaccag
 480
 ctggtagcgt ccttgaggga tctgttccag cgaacaaaag cgcgcgatat cagcgtcaaa
 540
 gtgcaactgg gccgcgatat ctggcccggt aataccgatg ccagccagtt ggaaaacgcc
 600
 ctgctcaacc tggcgatc
 618

<210> 1108

<211> 182

<212> PRT

<213> Homo sapiens

<400> 1108

Met Arg Pro Asn Ala Asn Ser Pro Lys Arg Pro Cys Ala Thr Ser Thr
 1 5 10 15
 Arg Thr Ser Lys Ser Ala Ser Pro Ser Ala His Arg Arg Trp Leu Lys
 20 25 30
 Pro Thr Asn Ala Trp Gln Asn Lys Met Phe Lys Arg Lys Arg Ala Glu
 35 40 45
 Asp Ala Leu Arg His Ala Gln Lys Met Glu Ala Gly Gly Gln Leu Thr
 50 55 60
 Gly Gly Ile Ala His Asp Phe Asn Asn Met Leu Thr Gly Ile Ile Gly
 65 70 75 80
 Ser Leu Asp Leu Met Gln Arg Tyr Ile Xaa Ala Gly Arg Ser Asp Glu
 85 90 95
 Ile Gly Arg Leu Thr Asp Ala Ala Val Ser Ser Ala His Arg Ala Ala
 100 105 110
 Ala Leu Thr His Arg Leu Leu Ala Phe Ser Arg Arg Gln Ser Leu Ala
 115 120 125
 Pro Arg Pro Leu Asp Pro Asn Gln Leu Val Ala Ser Leu Glu Asp Leu

```

      130              135              140
Phe Gln Arg Thr Lys Gly Ala His Ile Thr Leu Lys Val Gln Leu Gly
145              150              155              160
Arg Asp Ile Trp Pro Val Asn Thr Asp Ala Ser Gln Leu Glu Asn Ala
      165              170              175
Leu Leu Asn Leu Ala Ile
      180

```

```

<210> 1109
<211> 325
<212> DNA
<213> Homo sapiens

```

```

<400> 1109
accggtgagc atcagggagg caccatgcag acgactctcc catccagtct caagccgtcc
60
agcctcaaga tcgtgcacc gctggggggc atcctcgtgc ccctggatca ggtgcccgat
120
cccgttttcg cccagaagat ggtggggagac gggatctccc tggaccccat ctcaaacgaa
180
ttgctggcgc cggtgcgccg caccgtgacc cagctccaca acgcccacca cgcgctcacg
240
atcacgaccc cggaaggcat cgaggttctg gtccatctcg gactggatac cgatgatgctg
300
cgcggcgaca gctatcccc ccccn
325

```

```

<210> 1110
<211> 108
<212> PRT
<213> Homo sapiens

```

```

<400> 1110
Thr Gly Glu His Gln Gly Gly Thr Met Gln Thr Thr Leu Pro Ser Ser
1      5      10      15
Leu Lys Pro Ser Ser Leu Lys Ile Val Ala Pro Leu Gly Gly Ile Leu
20      25      30
Val Pro Leu Asp Gln Val Pro Asp Pro Val Phe Ala Gln Lys Met Val
35      40      45
Gly Asp Gly Ile Ser Leu Asp Pro Ile Ser Asn Glu Leu Leu Ala Pro
50      55      60
Val Ala Gly Thr Val Thr Gln Leu His Asn Ala His His Ala Leu Thr
65      70      75      80
Ile Thr Thr Pro Glu Gly Ile Glu Val Leu Val His Ile Gly Leu Asp
85      90      95
Thr Val Met Leu Arg Gly Asp Ser Tyr Pro Pro Pro
100      105

```

```

<210> 1111
<211> 385
<212> DNA
<213> Homo sapiens

```

```

<400> 1111

```

nnacgcgctcg ccccggtgctg cctggcagtg ggagaagagc atgaccttac cgagctcgcg
 60
 actgaactcg tcaacgccgc ctatagccgg gttgacatgg tggaaacgcg tggcgaaattc
 120
 gcagtagctg gcggcatcgt cgacgtcttc ccaccgggtgc tagaacaccc ggtccgtatc
 180
 gatttttttg gtgacgagat cgaggaaatg acctccttcg cggtagccga ccagcgatcc
 240
 accgacgaga ctcaccaaga actgatctgc gctccttgcc gtgagctcat cctcacgcac
 300
 gaggtacgtt ccgcagccaa ggctttgctg accgaccatc ccgaattagc tgacatgttg
 360
 gagcggatcg gcaacggtca agctt
 385

<210> 1112
 <211> 128
 <212> FRT
 <213> Homo sapiens

<400> 1112
 Xaa Arg Val Ala Pro Val Arg Leu Ala Val Gly Glu Glu His Asp Leu
 1 5 10 15
 Thr Glu Leu Ala Thr Glu Leu Val Asn Ala Ala Tyr Ser Arg Val Asp
 20 25 30
 Met Val Glu Arg Arg Gly Glu Phe Ala Val Arg Gly Gly Ile Val Asp
 35 40 45
 Val Phe Pro Pro Val Leu Glu His Pro Val Arg Ile Asp Phe Phe Gly
 50 55 60
 Asp Glu Ile Glu Glu Met Thr Ser Phe Ala Val Ala Asp Gln Arg Ser
 65 70 75 80
 Thr Asp Glu Thr His Gln Glu Leu Ile Cys Ala Pro Cys Arg Glu Leu
 85 90 95
 Ile Leu Thr Asp Glu Val Arg Ser Arg Ala Lys Ala Leu Leu Thr Asp
 100 105 110
 His Pro Glu Leu Ala Asp Met Leu Glu Arg Ile Gly Asn Gly Gln Ala
 115 120 125

<210> 1113
 <211> 400
 <212> DNA
 <213> Homo sapiens

<400> 1113
 nnncgaccga tgagcgatcg cgaaccgcgc aacctgggat acccctacgt cgagttcttc
 60
 cactcgact tctcggggac cggcggagtc gatcagaccg accgttctac caatctcgac
 120
 gagcacacca tcgaggagat gcatcagatc gcctcgcggt accccgactc cgttcggcg
 180
 ttgctgcoga tctctgcacct ggttcagtcg gtggacggac gcatctcgcc ggtcggatt
 240
 gagactcgcg ctgaagtgtc cggcattacc accgccagg tatccggggg ggcgaccttc
 300

tacaccatgt ataagaagca cctgcgggc cagcatcaca tcggtgtctg caccacggcg
 360
 ctgtgcgccg tcatgggtgg cgaggagggtg cttgcccgtn
 400

<210> 1114
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 1114
 Xaa Arg Pro Met Ser Asp Arg Glu Pro Val Asn Leu Gly Tyr Pro Tyr
 1 5 10 15
 Val Glu Ser Phe His Ser Asp Phe Ser Gly Thr Gly Gly Val Asp Gln
 20 25 30
 Thr Asp Arg Ser Thr Asn Ile Asp Glu His Thr Ile Glu Glu Met His
 35 40 45
 Gln Ile Ala Ser Arg Tyr Pro Asp Ser Arg Ser Ala Leu Leu Pro Ile
 50 55 60
 Leu His Leu Val Gln Ser Val Asp Gly Arg Ile Ser Pro Val Gly Ile
 65 70 75 80
 Glu Thr Ala Ala Glu Val Leu Gly Ile Thr Thr Ala Gln Val Ser Gly
 85 90 95
 Val Ala Thr Phe Tyr Thr Met Tyr Lys Lys His Pro Ala Gly Gln His
 100 105 110
 His Ile Gly Val Cys Thr Thr Ala Leu Cys Ala Val Met Gly Gly Glu
 115 120 125
 Glu Val Leu Ala Arg
 130

<210> 1115
 <211> 402
 <212> DNA
 <213> Homo sapiens

<400> 1115
 tctccgactg cacagattag agaaaggact gcgatgacca ttgcaccac tcatgttggt
 60
 tcctgcgccg gcacccccga gctgatcgag gcgaatcggt cgcgccgtga ggggttcgctc
 120
 ggcgaggctg acttcacgtc gctgctgcag gatcagggtg acggcggtgt gaagcgctcag
 180
 gctgagattg gcttgatgat cgtcaatgac ggcgagtacg gtcacgcgat gcttgacacg
 240
 gttgattacg gcgcgtgggt gacgtattcc atctctcggt tcggcggggt gtccctttgag
 300
 gacgtgcagc gttttgatgt gcgtcccccg gctggccgtg acggtcgcct gtctttctcg
 360
 tcgttcgctg agcgcccgca ctggcagcgt ttccggacgc gt
 402

<210> 1116
 <211> 134
 <212> PRT

<213> Homo sapiens

<400> 1116

```

Ser Pro Thr Ala Gln Ile Arg Glu Arg Thr Ala Met Thr Ile Arg Thr
 1             5             10             15
Thr His Val Gly Ser Leu Pro Arg Thr Pro Glu Leu Ile Glu Ala Asn
                20             25             30
Arg Ala Arg Arg Glu Gly Ser Leu Gly Glu Ala Asp Phe Thr Ser Leu
          35             40             45
Leu Gln Asp Gln Val Asp Gly Val Val Lys Arg Gln Ala Glu Ile Gly
          50             55             60
Leu Asp Ile Val Asn Asp Gly Glu Tyr Gly His Ala Met Leu Asp Thr
65             70             75             80
Val Asp Tyr Gly Ala Trp Trp Thr Tyr Ser Ile Ser Arg Phe Gly Gly
          85             90             95
Leu Ser Phe Glu Asp Val Gln Arg Phe Asp Val Arg Pro Pro Ala Gly
          100            105            110
Arg Asp Gly Arg Leu Ser Phe Ser Ser Phe Ala Glu Arg Arg Asp Trp
          115            120            125
Gln Arg Phe Arg Thr Arg
          130

```

<210> 1117

<211> 307

<212> DNA

<213> Homo sapiens

<400> 1117

```

ggcgccggtc ttgccctggc tggaagtggc atgcagacct tgggtcggaa cccgctggct
60
gacccctacc tgctaggtgt atcggtctggc gcaagtgtgg gagcaaccgc agtcacgcgt
120
ttggggatgt tcaacttcgtg gggaactcac cgactcactc ttgggtccct tgtagggggc
180
ttggcggcag ctgcattggt ctatctcatt tccatggcgc aaggaggcat gacgcccgtt
240
cggttgggtgc tgcggggcgt ggtgttgcgc tcggcggttc cgcgttggcg agtttccctg
300
tccttctg
307

```

<210> 1118

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1118

```

Gly Ala Gly Leu Ala Leu Ala Gly Ser Gly Met Gln Thr Leu Val Arg
 1             5             10             15
Asn Pro Leu Ala Asp Pro Tyr Leu Leu Gly Val Ser Ala Gly Ala Ser
          20             25             30
Val Gly Ala Thr Ala Val Ile Ala Leu Gly Met Phe Thr Ser Trp Gly
          35             40             45
Thr His Arg Leu Thr Leu Gly Ala Leu Val Gly Ala Leu Ala Ala Ala

```

```

      50              55              60
Ala Leu Val Tyr Leu Ile Ser Met Ala Gln Gly Gly Met Thr Pro Leu
65              70              75              80
Arg Leu Val Leu Ser Gly Val Val Leu Ser Ser Ala Phe Ser Arg Trp
      85              90              95
Arg Val Ser Ser Ser Phe
      100

```

```

<210> 1119
<211> 353
<212> DNA
<213> Homo sapiens

```

```

<400> 1119
cgcgctccttg agatgcttga gcaggctcggt attgaggatc cagccagggt gatggattcc
60
tatccgcate aactgtccgg tggccagcgt caacggggttc tgcttgccat ggcggttggtg
120
aactgcgcgg atctgctcat ttgtgacgag cgcagcagcg ccttggacgt caccggtgcag
180
ttccagggtac tggcgactat cgatgaggtg cttgactcgg ttgggtgccgc atgcctattt
240
attaccacag atttggcggt tgtctcgcac atctgccggg agcttatcgt gatgacgtcg
300
ggcaagggtcg ttgaagccgg atcagcgcgt gatgtgttat ctacacctga tca
353

```

```

<210> 1120
<211> 117
<212> PRT
<213> Homo sapiens

```

```

<400> 1120
Arg Val Leu Glu Met Leu Glu Gln Val Gly Ile Glu Asp Pro Ala Arg
1              5              10              15
Val Met Asp Ser Tyr Pro His Gln Leu Ser Gly Gly Gln Arg Gln Arg
20              25              30
Val Leu Leu Ala Met Ala Leu Val Asn Ser Pro Asp Leu Leu Ile Cys
35              40              45
Asp Glu Pro Thr Thr Ala Leu Asp Val Thr Val Gln Ser Gln Val Leu
50              55              60
Ala Thr Ile Asp Glu Val Leu Asp Ser Val Gly Ala Ala Cys Leu Phe
65              70              75              80
Ile Thr His Asp Leu Ala Val Val Ser His Ile Cys Arg Glu Leu Ile
85              90              95
Val Met Thr Ser Gly Lys Val Val Glu Ala Gly Ser Ala Arg Asp Val
100              105              110
Leu Ser His Pro Asp
115

```

```

<210> 1121
<211> 406
<212> DNA
<213> Homo sapiens

```

```

<400> 1121
tgatcaccca tgtccactc gaccgcgcgc tcgacgatgc gacggctgag acgatgctcg
60
cccagggcac ggtgttcac cgcaccttga cgtatgatga aggcgctgcc gcgaattctca
120
ccgcagcggg cgttcccggt gtgagctatg cacaacccca cgagagcacg cgcgcgatgc
180
atgccgcggg cgttccggtc ctggcgggca cgcagccta catcgggtcc ttcacacggg
240
catcgccgcc atacggcgag agcatgcacg acgaagacgc ctacatcggg ctctctgaac
300
gggcaatgcc gccatacggc gagagcatgc acgacgaact cgctctgctc gtggacgccg
360
gcctgtcaac agccgaagcg ctgcgcgctg ccacctcgac gggcgc
406

```

```

<210> 1122
<211> 117
<212> PRT
<213> Homo sapiens

```

```

<400> 1122
Met Leu Ala Gln Gly Thr Val Phe Ile Pro Thr Leu Thr Met Met Lys
1 5 10 15
Gly Val Ala Ala Asn Leu Thr Ala Ala Gly Val Pro Gly Val Ser Tyr
20 25 30
Ala His Ala His Glu Ser Thr Arg Ala Met His Ala Ala Gly Val Pro
35 40 45
Val Leu Ala Gly Thr Asp Ala Tyr Ile Gly Ser Phe Thr Arg Ala Ser
50 55 60
Pro Pro Tyr Gly Glu Ser Met His Asp Glu Asp Ala Tyr Ile Gly Leu
65 70 75 80
Leu Glu Arg Ala Met Pro Pro Tyr Gly Glu Ser Met His Asp Glu Leu
85 90 95
Ala Leu Leu Val Asp Ala Gly Leu Ser Thr Ala Glu Ala Leu Arg Ala
100 105 110
Ala Thr Ser Thr Gly
115

```

```

<210> 1123
<211> 337
<212> DNA
<213> Homo sapiens

```

```

<400> 1123
gccggcgatg cgttcattaa ggccctaagat gcgccgacgc ctccccgctt tcctcgccct
60
cgctccacc gcccttgccg cagcggggat ggtggggctg tcgtccgagg gggcatcgcc
120
aagcgaatgc tcccctgttg atattgccgc agtgccgcgag gccctgcgcg attcgctcgc
180
taaggcgaag ctcgaccgcg actccaccaa cgaggatgaa cactectttt ccatgtctta
240

```

ccgcgcgcaa gataaggagc aggtcagctt gctggggacg aagtatgagg ccgacggtgc
 300
 acccgtctgc cccgatgacc ccaatgaggc agcgcgc
 337

<210> 1124

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1124

Met	Arg	Ser	Leu	Arg	Pro	Lys	Met	Arg	Arg	Arg	Leu	Pro	Ala	Phe	Leu
1				5					10					15	
Ala	Leu	Ala	Ser	Thr	Ala	Leu	Ala	Ala	Ala	Gly	Met	Val	Gly	Cys	Ser
			20					25					30		
Ser	Glu	Gly	Ala	Ser	Pro	Ser	Glu	Cys	Ser	Pro	Val	Asp	Ile	Ala	Ala
		35				40					45				
Val	Arg	Glu	Ala	Leu	Pro	His	Ser	Leu	Ala	Lys	Ala	Lys	Leu	Asp	Pro
	50					55				60					
His	Ser	Thr	Asn	Glu	Asp	Glu	His	Ser	Phe	Ser	Met	Leu	Tyr	Arg	Ala
65				70					75					80	
Gln	Asp	Lys	Glu	Gln	Val	Ser	Leu	Leu	Gly	Thr	Lys	Tyr	Glu	Ala	Asp
			85						90				95		
Gly	Ala	Pro	Val	Cys	Pro	Asp	Asp	Pro	Asn	Glu	Ala	Ala	Arg		
		100						105					110		

<210> 1125

<211> 555

<212> DNA

<213> Homo sapiens

<400> 1125

nncttgaatc gaatcggcat tgcgtctaaa catgacgttg agacactctc tgctaagctc
 60
 gaagagctga cggcattgct agaactgtgc gcgcgtaaac actaaggaga catcgggagtg
 120
 gctgttaaaa agactactca gaaagaaggc agctcgtgga tcggggaagt tgaataaatat
 180
 tcccgtaaaa totggcttgc tggtttaggc gtgtactcga aggttagcag tgacggcggc
 240
 aaatacttcg agacgtttgt caaggacggc gagaaggccg agaagttgac caagagccca
 300
 gtcggtaaaa aagtagaggc gcgcaaaagcg agcgccgggt ctgcgaaatc gacgatttcg
 360
 gatacctggg gcaagttgga agagactttc gacaagcgtc tcaacagtgc tatttcgcga
 420
 ttggcggtgc ccagcaaagc ggaactgaag acgctgcaca gcaaggtcga taccctgacc
 480
 aagcaaatcg aaaaactcac cggtgccaaa gtggccccgg ctaaaacggc agccgctaaa
 540
 cctgctgccca agctt
 555

<210> 1126

<211> 146
 <212> PRT
 <213> Homo sapiens

<400> 1126
 Met Ala Val Lys Lys Thr Thr Gln Lys Glu Gly Ser Ser Trp Ile Gly
 1 5 10 15
 Glu Val Glu Lys Tyr Ser Arg Lys Ile Trp Leu Ala Gly Leu Gly Val
 20 25 30
 Tyr Ser Lys Val Ser Ser Asp Gly Gly Lys Tyr Phe Glu Thr Leu Val
 35 40 45
 Lys Asp Gly Glu Lys Ala Glu Lys Leu Thr Lys Ser Pro Val Gly Lys
 50 55 60
 Lys Val Glu Ala Ala Lys Ala Ser Ala Gly Ser Ala Lys Ser Ser Ile
 65 70 75 80
 Ser Asp Thr Trp Gly Lys Leu Glu Glu Thr Phe Asp Lys Arg Leu Asn
 85 90 95
 Ser Ala Ile Ser Arg Leu Gly Val Pro Ser Lys Ala Glu Leu Lys Thr
 100 105 110
 Leu His Ser Lys Val Asp Thr Leu Thr Lys Gln Ile Glu Lys Leu Thr
 115 120 125
 Gly Ala Lys Val Ala Pro Ala Lys Thr Ala Ala Lys Pro Ala Ala
 130 135 140
 Lys Leu
 145

<210> 1127
 <211> 352
 <212> DNA
 <213> Homo sapiens

<400> 1127
 ccgacgcg tactcgtggt cgggtgccga gtgatgggtg cagcacacgc acacgcgctc
 60
 cgcgggtccc tccaggcagt cgtgtgcggc gtggtcgacc tgcaggagcg agcagcgcaa
 120
 tcactcgttt cgggaagtggg cgtaccgggg ttcaccgacc tgggtgaaggc gatcgagtcg
 180
 accgctccgg acgcgcgggt catcgccacg ccggactcgg ctcaccgccca accgggtgag
 240
 accgcatcgc acgcgcgcct tgccgtcctg gtcgagaaac cgctcgccac gaccgtcgat
 300
 gacgcgaag cgategtgct ccgcgctgaa cgggcccggc tccgtctcat ga
 352

<210> 1128
 <211> 117
 <212> PRT
 <213> Homo sapiens

<400> 1128
 Pro Asp Arg Val Leu Val Val Gly Ala Gly Val Met Gly Ala Ala His
 1 5 10 15
 Ala His Ala Leu Arg Gly Ser Leu Gln Ala Val Val Cys Gly Val Val

```

                20                25                30
Asp Leu Gln Glu Arg Ala Ala Gln Ser Leu Ala Ser Glu Val Gly Val
                35                40                45
Pro Gly Phe Thr Asp Leu Val Lys Ala Ile Glu Ser Thr Ala Pro Asp
                50                55                60
Ala Ala Val Ile Ala Thr Pro Asp Ser Ala His Arg Gln Pro Ala Glu
65                70                75                80
Thr Ala Ile Asp Ala Gly Leu Ala Val Leu Val Glu Lys Pro Leu Ala
                85                90                95
Thr Thr Val Asp Asp Ala Glu Ala Ile Val Leu Arg Ala Glu Arg Ala
                100                105                110
Gly Val Arg Leu Met
                115

```

<210> 1129

<211> 336

<212> DNA

<213> Homo sapiens

<400> 1129

```

ntggcagccc tggaggagcc gatggtggac ctggacggcg agctgcccttt cgtgcggccc
60
ctgccccaca ttgccgtgct ccaggacgag ctgccgcaac tcttcacagga tgacgacgtc
120
ggggccgatg aggaagaggg agagttgctgg ggccaacaca cgctcacaga gaagtttgct
180
tgccctggatg actcctttgg ccatgactgc agcttgacct gtgatgactg caggaacgga
240
gggaacctgcc tctctgggctt ggatggctgg gattgccccg agggctggac tgggctcacc
300
tgcaatgaga cttggtcttc gggctgcatg gatatt
336

```

<210> 1130

<211> 112

<212> PRT

<213> Homo sapiens

<400> 1130

```

Xaa Ala Ala Leu Glu Glu Pro Met Val Asp Leu Asp Gly Glu Leu Pro
1                5                10                15
Phe Val Arg Pro Leu Pro His Ile Ala Val Leu Gln Asp Glu Leu Pro
                20                25                30
Gln Leu Phe Gln Asp Asp Val Gly Ala Asp Glu Glu Glu Ala Glu
                35                40                45
Leu Arg Gly Glu His Thr Leu Thr Glu Lys Phe Val Cys Leu Asp Asp
50                55                60
Ser Phe Gly His Asp Cys Ser Leu Thr Cys Asp Asp Cys Arg Asn Gly
65                70                75                80
Gly Thr Cys Leu Leu Gly Leu Asp Gly Trp Asp Cys Pro Glu Gly Trp
                85                90                95
Thr Gly Leu Ile Cys Asn Glu Thr Trp Ser Ser Gly Cys Met Asp Ile
                100                105                110

```

```

<210> 1131
<211> 672
<212> DNA
<213> Homo sapiens

<400> 1131
gcgttggtgg tgctcatggc cgggaaaaat ccgctggatc aatacctctt tgagcacccc
60
gaattattgt tctcgtcctc ggtggaatcg actgtgttgc acccggataa cccgtatgtg
120
ctcggcccg cagtggccgc ggccgcccag gaggcatacc tctcccctgc ggacgaagag
180
ttttacgggt cggcctttgc cgggatatgc aaaacgctga caggccagaa cgtactcgca
240
cgtcgcggaa atcggctgtt ctggactcgt ccggaacggg ctgtcgacgc catcgacctg
300
cgatcggcgg caggcaaagg gattgacatt atcgactgtt ccaccgggag ggtcatcggg
360
gtagtcgacg aagccgcgcg agaccgtacc gtgcatccag gcgcggtgta cctgcatcag
420
ggggatcagt ggctggtcga cgaatacaac ccggtcgagc accacgccct ggtgcaccag
480
gacctgcggg gatattggac tcaaccgcag tcagcgtcga cggtagaagt ccttcgggag
540
gagagacgtc gcgctgttgg tcccgatatg gtggcgtgcg ggcagggtgga actgacagag
600
caagtgtgtt ggtatctgcg tcgcgacgaa ttcaccaatg atgtgtggtta ctgcgtggcc
660
ctcgagatgc cc
672

<210> 1132
<211> 224
<212> PRT
<213> Homo sapiens

<400> 1132
Ala Leu Val Val Leu Met Ala Arg Glu Asn Pro Leu Asp Gln Tyr Leu
1 5 10 15
Phe Glu His Pro Glu Leu Phe Ser Ser Ser Val Glu Ser Thr Val
20 25 30
Leu His Pro Asp Asn Pro Tyr Val Leu Gly Pro His Val Ala Ala
35 40 45
Ala Gln Glu Ala Tyr Leu Ser Pro Ala Asp Glu Glu Phe Tyr Gly Ser
50 55 60
Ala Phe Ala Gly Ile Cys Lys Thr Leu Thr Gly Gln Asn Val Leu Arg
65 70 75 80
Arg Arg Gly Asn Arg Leu Phe Trp Thr Arg Pro Glu Arg Ala Val Asp
85 90 95
Ala Ile Asp Leu Arg Ser Ala Ala Gly Lys Gly Ile Asp Ile Ile Asp
100 105 110
Val Ser Thr Gly Arg Val Ile Gly Val Val Asp Glu Ala Ala Ala Asp
115 120 125
Arg Thr Val His Pro Gly Ala Val Tyr Leu His Gln Gly Asp Gln Trp

```

130	135	140
Leu Val Asp Glu Tyr Asn Pro Val Glu His His Ala Leu Val His Gln		
145	150	155
Asp Leu Pro Gly Tyr Trp Thr Gln Pro Gln Ser Ala Ser Thr Val Arg		
	165	170
Ile Leu Arg Glu Glu Arg Arg Arg Ala Cys Gly Pro Gly Tyr Val Ala		
	180	185
Cys Gly Gln Val Glu Leu Thr Glu Gln Val Val Gly Tyr Leu Arg Arg		
	195	200
Asp Glu Phe Thr Asn Asp Val Trp Tyr Ser Leu Ala Leu Glu Met Pro		
210	215	220

<210> 1133

<211> 796

<212> DNA

<213> Homo sapiens

<400> 1133

acgcgtgaag gggggtccag cgggtgtggc actcgatgac aagacagttt gagagcggct
 60
 tgtctccggg gacctggcgt aggtctcctc tgccttaacc cttggctttt gcaactcctc
 120
 tgtctgtcct ccatacaagc ttcttgcccc tagggaggac gggcttctta acagggggag
 180
 ccggttctctg tcctaacccc actggcatct tacactctgg gagatagctt cccctgaga
 240
 ggcgagtgag ccacgtaagg ggaggtgggc gatggcttcc cttctgtctt ggggtggggg
 300
 agtcagggtac agtatattttt cttttaaaag atcattgate acataataag gtttgtcata
 360
 gtctctaate acagactgtg gaaatttggg gaattcacgg cacctaggat gggagtggac
 420
 ttctgattgt gagctgattt gggagctaac ctcaaggaaa ctcctcttgc aagccccctg
 480
 ctgggtgtcg gggccttcgc cagggaccte ccggggacte tggacgtctt ttgtctgccc
 540
 ttctttttcc ctcacctcgc tcccccgta gaaagtgggg ctcatgcagc tcagctcagt
 600
 gacagagggg ttattagggg tagctctggg acccatcttt tgggtatttc ttctctctct
 660
 ttctctaatt gaataattgt ttctgtctac acttctttat ttctctctct ctacagctgc
 720
 cttctaaaaa tgtgcttttc tgttcctgca gaactgaagc ttgcatggcc ttgttgtgta
 780
 ctttcccttc acgcgt
 796

<210> 1134

<211> 147

<212> FRT

<213> Homo sapiens

<400> 1134

Met Gly Pro Arg Ala Thr Pro Asn Lys Pro Ser Val Thr Glu Leu Ser

```

      1           5           10           15
Cys Met Ser Pro Thr Phe Ser Arg Gly Ser Glu Val Arg Glu Lys Glu
      20           25           30
Gly Gln Thr Lys Ser Val Gln Ser Pro Arg Glu Val Pro Gly Glu Gly
      35           40           45
Pro Asp Thr Gln Gln Gly Ala Cys Lys Arg Ser Phe Leu Glu Val Ser
      50           55           60
Ser Gln Ile Ser Ser Gln Ser Glu Ala His Ser His Pro Arg Cys Arg
      65           70           75           80
Glu Phe Ser Lys Phe His Arg Ser Val Ile Lys Asp Tyr Asp Lys Pro
      85           90           95
Tyr Tyr Val Ile Asn Asp Ala Leu Lys Glu Lys Ile Leu Tyr Leu Thr
      100          105          110
Pro Pro Thr Gln Asp Arg Arg Glu Ala Ile Ala His Leu Pro Leu Arg
      115          120          125
Gly Ser Leu Ala Ser Gln Gly Glu Ala Ile Ser Gln Ser Val Arg Cys
      130          135          140
Gln Trp Gly
145

```

<210> 1135

<211> 376

<212> DNA

<213> Homo sapiens

<400> 1135

```

gatcaggcca cacaggacaa cttcgagaag ggctccatct tcccaccctt caccagcatc
60
agaaagatct ctgcgcacat cgctgcagcc gtggctgcaa aagcctacga gtcggtctg
120
gcgaccctgc tgccctcccc cagcgacctg gtgaaatatg cagagaactg catgtacact
180
ccgctctacc gcaactaccg gtagtgctgc ggggatcaat ttgacagtaa taaaaaatct
240
actatcaacg cggatggtac tctgttgttt atagtccttg ctgctaacca ccctgtgtgc
300
tgggtgctgt ggagaggcat tgtacctgct catgcataata tgatatatat atgtgtgtaac
360
gttgtgaaag caaact
376

```

<210> 1136

<211> 67

<212> PRT

<213> Homo sapiens

<400> 1136

```

Asp Gln Ala Thr Gln Asp Asn Phe Glu Lys Gly Ser Ile Phe Pro Pro
1           5           10           15
Phe Thr Ser Ile Arg Lys Ile Ser Ala His Ile Ala Ala Val Ala
      20           25           30
Ala Lys Ala Tyr Glu Leu Gly Leu Ala Thr Arg Leu Pro Pro Pro Ser
      35           40           45
Asp Leu Val Lys Tyr Ala Glu Asn Cys Met Tyr Thr Pro Val Tyr Arg

```

```

      50              55              60
Asn Tyr Arg
65

<210> 1137
<211> 357
<212> DNA
<213> Homo sapiens

<400> 1137
acgcgtcgct ggaacccgaa gatgaagcgc ttcattctca ccgagcgcaa cggatatctac
60
atcattgacc tgcaccagtc gctgacctac attgataagg cgtacgcctt cgtcaaggag
120
actgtcgcca agggcgccca gattcttttc gtcggcacga agaagcaggc ccaggagtc
180
atcgttgagc aggccactcg cgttggcatg ccctatgtca accagcgttg gcttggggga
240
atgctcacta atttcagac catctcgaag cgcattgccc ggctcaagga gctcagggcc
300
atggactttg acaaggtttc cggctccggt ctaccaaga aggagctgct tatgctc
357

<210> 1138
<211> 119
<212> PRT
<213> Homo sapiens

<400> 1138
Thr Arg Arg Trp Asn Pro Lys Met Lys Arg Phe Ile Phe Thr Glu Arg
1      5      10      15
Asn Gly Ile Tyr Ile Ile Asp Leu His Gln Ser Leu Thr Tyr Ile Asp
20      25      30
Lys Ala Tyr Ala Phe Val Lys Glu Thr Val Ala Lys Gly Gly Gln Ile
35      40      45
Leu Phe Val Gly Thr Lys Lys Gln Ala Gln Glu Ser Ile Val Glu Gln
50      55      60
Ala Thr Arg Val Gly Met Pro Tyr Val Asn Gln Arg Trp Leu Gly Gly
65      70      75      80
Met Leu Thr Asn Phe Gln Thr Ile Ser Lys Arg Ile Ala Arg Leu Lys
85      90      95
Glu Leu Glu Ala Met Asp Phe Asp Lys Val Ser Gly Ser Gly Leu Thr
100      105      110
Lys Lys Glu Leu Met Leu
115

<210> 1139
<211> 456
<212> DNA
<213> Homo sapiens

<400> 1139
gtgcacaggt cgtctgaggc catgcgcgg acgatcgatc cgagtatggc ggcaccttca
60

```

ccaatcccgt aggacccgtc tcgtccagca tcgaccaagg cgctgttgag gcgttcggct
 120
 tcggtaataga actcgatgag ctcaatatcc acgggggtag cgaatacgta gatcttggcc
 180
 agactgaggc cttggaggag cgcggccgtc ggggggacgt ggccctggcg cggcgcttcc
 240
 ttgctctcaa ggacttcgtc gtgcgggctg acaaggaata cgtttggtg gtgcctcgca
 300
 atgcagtctc gagcgtgggt accatcgagg tgaaggacgg tttcggcata gaggtcacgt
 360
 tccacatcgg ccacagttag ttgcagcact cctgagtcga ctatgatgac gcgcttctct
 420
 gcgcgctctt cgctgacgtc ggccaggacc gctagc
 456

<210> 1140
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 1140
 Met Trp Thr Met Thr Ser Met Pro Lys Pro Ser Phe Thr Ser Met Val
 1 5 10 15
 Thr Thr Leu Glu His Ala Leu Gln Ala Thr Thr Gln Thr Tyr Ser Leu
 20 25 30
 Ser Ala Ala Thr Thr Lys Ser Leu Arg Ala Arg Asn Ala Arg Pro Gln
 35 40 45
 Ala Thr Ser Pro Arg Arg Pro Arg Ser Ser Lys Ala Ser Val Trp Pro
 50 55 60
 Arg Ser Thr Ile Ser Leu Pro Pro Trp Ile Leu Ser Ala Ser Ser Ser
 65 70 75 80
 Leu Pro Lys Pro Asn Ala Ser Thr Ala Pro Trp Ser Met Leu Asp Glu
 85 90 95
 Thr Gly Pro Thr Gly Leu Val Lys Val Pro Pro Tyr Ser Asp Arg Ser
 100 105 110
 Ser Ala Ala Trp Pro Gln Thr Thr Cys Ala
 115 120

<210> 1141
 <211> 354
 <212> DNA
 <213> Homo sapiens

<400> 1141
 ggcccatgc tcggcgggt ggtgctgggt gtggccgaag cctttggcgc cgatatcttc
 60
 ggcgaccagt acaaggacgt ggtggcggtt ggccctgttg ttcctggtgt gttgttccgt
 120
 ccgaccggca ttctggggcg tccggaggtt gagaaagtat gagcagatat cttaaactgg
 180
 cgtttttcag cgccctgttg gtgtggggcg tggcctttcc ggtactcggc ctcaagctga
 240
 gcattgtcgg gatcaaccac gaagtgcagt gcaccggctc cgtgaccttg accatcatcg
 300

ccctgtgctc ggtgccgatg ttcctgcgcg tgctgtttac ccagcaagtc ggtg
354

<210> 1142

<211> 53

<212> PRT

<213> Homo sapiens

<400> 1142

Gly Ala Met Leu Gly Gly Leu Val Leu Gly Val Ala Glu Ala Phe Gly
1 5 10 15
Ala Asp Ile Phe Gly Asp Gln Tyr Lys Asp Val Val Ala Phe Gly Leu
20 25 30
Leu Val Leu Val Leu Leu Phe Arg Pro Thr Gly Ile Leu Gly Arg Pro
35 40 45
Glu Val Glu Lys Val
50

<210> 1143

<211> 353

<212> DNA

<213> Homo sapiens

<400> 1143

acgcgttgca catccccag gaccatcaac cgcggcattg ccgcatagac ctggagatcc
60
catgcaacgt gaaatgaagt tcgaatcgat caaggcaaaag gccaaaggcga tgctcatcgg
120
cgcagccgac gacacagcaa gcgcaggcgc gaccaaccga ggggtggctca acagcgccgc
180
attcgaaatc ctggcccacg tgcccgctcaa tgcccaacac tacgcgtctc ccgagagacc
240
ggcgctggag gagttcgcca agagcttcca gccgcgcaac aaccaggact acgtggccgc
300
gategccaag aaggccgcga accacacccat gcatcccgcc aggcagtcga ttt
353

<210> 1144

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1144

Met His Gly Val Val Arg Gly Leu Leu Gly Asp Arg Gly His Val Val
1 5 10 15
Leu Val Val Ala Arg Leu Glu Ala Leu Gly Glu Leu Leu Gln Arg Arg
20 25 30
Ser Leu Gly Glu Arg Val Val Leu Gly Ile Asp Gly His Val Gly Gln
35 40 45
Asp Phe Glu Cys Gly Ala Val Glu Pro Pro Ser Val Gly Arg Ala Cys
50 55 60
Ala Cys Cys Val Val Gly Cys Ala Asp Glu His Arg Leu Gly Leu Cys
65 70 75 80
Leu Asp Arg Phe Glu Leu His Phe Thr Leu His Gly Ile Ser Arg Ser

Met Arg Gln Cys Arg Gly
100

85

90

95

<210> 1145
<211> 360
<212> DNA
<213> Homo sapiens

<400> 1145
gtcttcggcg ggtcggcct gttctattgc gtcatgaccc cgggtgtactg gttctcggcc
60
catgaagtgg ccggcacctg ggtactcggg ctgctcggcg cgatggctct gatgggtgtt
120
ttctacgtcc aggtcatcgc caagaagatc aatcctcgac cctccgacga gaaggacgcc
180
gaggtgatcg acggggctgg tccggctcgg ttcttccgc cacagagtat ctggccggtc
240
tggtgcgcgc tcgttgctgc catcatgtgc ctgcggccga tctcggctg gtggatctct
300
ctgctcgggc tgggcattgt tatctgggccc gcctcgggtt gggcttttga gtactaccgc
360

<210> 1146
<211> 120
<212> PRT
<213> Homo sapiens

<400> 1146
Val Phe Gly Gly Leu Gly Leu Phe Tyr Cys Val Met Thr Pro Val Tyr
1 5 10 15
Trp Phe Ser Ala His Glu Val Ala Gly Thr Trp Val Leu Gly Leu Ser
20 25 30
Ala Ala Met Ala Leu Met Val Phe Phe Tyr Val Gln Val Ile Ala Lys
35 40 45
Lys Ile Asn Pro Arg Pro Ser Asp Glu Lys Asp Ala Glu Val Ile Asp
50 55 60
Gly Ala Gly Pro Val Gly Phe Phe Pro Pro Gln Ser Ile Trp Pro Phe
65 70 75 80
Trp Cys Ala Leu Val Val Ala Ile Met Cys Leu Gly Pro Ile Phe Gly
85 90 95
Trp Trp Ile Ser Leu Leu Gly Leu Gly Ile Val Ile Trp Ala Ala Ser
100 105 110
Gly Trp Ala Phe Glu Tyr Tyr Arg
115 120

<210> 1147
<211> 409
<212> DNA
<213> Homo sapiens

<400> 1147
tgtacattgg ctatgcagtc tggcctcctg aaggttatga tagtagccaa aaatatagaa
60

gccaaaaagg catccacctt ctccatcaat ccagaattga tcatgctcat gcctgtgggt
 120
 ggatcactat gtgctctcca aattgggagg ggaagtctac tctcctctct cetctctctc
 180
 ccacctctcc ctctctctct tctcctttct attcccaggg cagtgggaaca tgatgaggtt
 240
 cttttccctt catggatata ctctttctgc cctccacata aaggggcatt gatggatctt
 300
 caagaatggg atgcctttcc ctagaaaggc taaatattca tgaggctgaa tgtgaggatc
 360
 cagagtacac tgaatatata ctgggtcatca gtacacatag aatctgatin
 409

<210> 1148
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1148
 Met Gln Ser Gly Leu Lys Val Met Ile Val Ala Lys Asn Ile Glu
 1 5 10 15
 Ala Lys Lys Ala Ser Thr Phe Phe Ile Asn Pro Glu Leu Ile Met Leu
 20 25 30
 Met Pro Val Gly Gly Ser Leu Cys Ala Leu Gln Ile Gly Arg Gly Ser
 35 40 45
 Leu Leu Ser Ser Leu Leu Ser Leu Pro Pro Ser Pro Leu Ser Ser Leu
 50 55 60
 Leu Ser Ile Pro Arg Ala Val Glu His Asp Glu Val Leu Phe Pro Ser
 65 70 75 80
 Trp Ile Ser Ser Phe Cys Pro Pro His Lys Gly Ala Leu Met Asp Leu
 85 90 95
 Gln Glu Trp Asp Ala Phe Pro
 100

<210> 1149
 <211> 309
 <212> DNA
 <213> Homo sapiens

<400> 1149
 gtcgacttct gcatggaaaa acgcatctg gtgattgagc acgttgcgga gatgtacggc
 60
 cgtgaggcgg tatcgagat cattaccttc ggtaccatgg cggcgaaagc ggttattcgt
 120
 gacgtgggcc gtgtactggg tcaccogtat ggcttcgtcg atcgcatctc caagctgggtg
 180
 ccgcccgatc cgggcatgac gctggaaaaa gcctttgccg ccgaaccgca gttgccggaa
 240
 atctacgagg ccgatgagga agtcaaagcg ctgatcgaca tggcgcgcaa gctgggaagg
 300
 gtgacgcgg
 309

<210> 1150

<211> 103

<212> PRT

<213> Homo sapiens

<400> 1150

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Val Asp Phe Cys Met Glu Lys Arg Asp Leu Val Ile Glu His Val Ala
 1           5           10           15
Glu Met Tyr Gly Arg Glu Ala Val Ser Gln Ile Ile Thr Phe Gly Thr
 20           25           30
Met Ala Ala Lys Ala Val Ile Arg Asp Val Gly Arg Val Leu Gly His
 35           40           45
Pro Tyr Gly Phe Val Asp Arg Ile Ser Lys Leu Val Pro Asp Pro
 50           55           60
Gly Met Thr Leu Glu Lys Ala Phe Ala Ala Glu Pro Gln Leu Pro Glu
 65           70           75           80
Ile Tyr Glu Ala Asp Glu Glu Val Lys Ala Leu Ile Asp Met Ala Arg
 85           90           95
Lys Leu Gly Arg Val Thr Arg
100

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<210> 1151

<211> 360

<212> DNA

<213> Homo sapiens

<400> 1151

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gcgcgcattt tttgcaaccc aagcgacgtc attatggccg agtcgcggcg ttatgtcggg
60
gcgctcaata ccttcgcctc gtaccaaact gaggtcatc acgtcgacat ggacgacagc
120
gggttggttc cggaatccct gcgtgagaaa gtgactgcag gcgctcaaga cggcaagtcg
180
gtgaagtcc tttcacgggt tcctaactac tcgaaccggt cggaatctc gcaatccacc
240
gagcgtgcgc gggagatcct agcgggtggct gacgagctgg atctgttggt ggttgaggac
300
aaccgcgtacg gggtactcaa cctcgatggt gatccactgc cgacgttgaa gtcgatggat
360

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<210> 1152

<211> 120

<212> PRT

<213> Homo sapiens

<400> 1152

```

Ala Arg Ile Phe Cys Asn Pro Ser Asp Val Ile Met Ala Glu Ser Pro
 1           5           10           15
Ala Tyr Val Gly Ala Leu Asn Thr Phe Ala Ser Tyr Gln Thr Glu Val
 20           25           30
Ile His Val Asp Met Asp Asp Ser Gly Leu Val Pro Glu Ser Leu Arg
 35           40           45
Glu Lys Val Thr Ala Ala Arg Gln Asp Gly Lys Ser Val Lys Phe Leu
 50           55           60
Tyr Thr Val Pro Asn Tyr Ser Asn Pro Ser Gly Ile Ser Gln Ser Thr

```

```

65          70          75          80
Glu Arg Arg Arg Glu Ile Leu Ala Val Ala Asp Glu Leu Asp Leu Leu
          85          90          95
Val Val Glu Asp Asn Pro Tyr Gly Leu Leu Asn Leu Asp Gly Asp Pro
          100          105          110
Leu Pro Thr Leu Lys Ser Met Asp
          115          120

```

<210> 1153

<211> 416

<212> DNA

<213> Homo sapiens

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<400> 1153
gCGTggattc gTcctggcgg cgtcgctacc gacctgcccc agaccgggct cgaccagttg
60
cgtgacctca tcaagcggat ggaaaagtac ctccccgaga tcggtcagtt ctgcaatgag
120
aatccgatct ttaaggcccc cactcagggc attggttacy ctgatctgtc tacctgtatg
180
gcctctggag ttaactggtcc tgetctgcgc gctaccggcc tgccgtggga cctgcgcaag
240
accagccct attgcgatta cgacacgtat gaattcgacg tcgccacctg ggataacctgt
300
gactgttaag ggcgtttccg catccgcctg gaagagatgg accagtcggt gcgcattctc
360
aagcaatgcc tcaaacgcct cgaggacacc cagggtgacc gtaatatggt cgagga
416

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<210> 1154

<211> 138

<212> PRT

<213> Homo sapiens

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<400> 1154
Ala Trp Ile Arg Pro Gly Gly Val Ala Thr Asp Leu Pro Glu Thr Gly
1          5          10          15
Leu Asp Gln Leu Arg Asp Leu Ile Lys Arg Met Glu Lys Tyr Leu Pro
20          25          30
Glu Ile Gly Gln Phe Cys Asn Glu Asn Pro Ile Phe Lys Ala Arg Thr
35          40          45
Gln Gly Ile Gly Tyr Ala Asp Leu Ser Thr Cys Met Ala Leu Gly Val
50          55          60
Thr Gly Pro Ala Leu Arg Ala Thr Gly Leu Pro Trp Asp Leu Arg Lys
65          70          75          80
Thr Gln Pro Tyr Cys Asp Tyr Asp Thr Tyr Asp Phe Asp Val Ala Thr
85          90          95
Trp Asp Thr Cys Asp Cys Tyr Gly Arg Phe Arg Ile Arg Leu Glu Glu
100          105          110
Met Asp Gln Ser Val Arg Ile Leu Lys Gln Cys Leu Lys Arg Leu Glu
115          120          125
Asp Thr Gln Gly Asp Arg Asn Met Val Glu
130          135

```

<210> 1155

<211> 339

<212> DNA

<213> Homo sapiens

<400> 1155

cttaagttat ttgtgtcttt gcctctctcc tcaggtgtg aagattacag aaatctggga
 60
 tggcttatgg gaogcttctc agccctaagt aggaaaaacag cagtgaataa ggcaacacaa
 120
 acatcacgca ggactggggg ttttggggaa acagctcact ttagagcagt gcagtgtaga
 180
 gctttccgctc ttctaccagg gtccaccttt aacactgttt atctgaaaaa ttccccctg
 240
 gcttactcgc ttgcagctgc ccacttttga gaaagatggc gctctgatct ctacgctccc
 300
 tgttccttca gggactccat agtatTTTTT ttcacgcgt
 339

<210> 1156

<211> 91

<212> PRT

<213> Homo sapiens

<400> 1156

Met Gly Arg Phe Ser Ala Leu Ser Arg Lys Thr Ala Val Lys Met Ala
 1 5 10 15
 Thr Lys Thr Ser Arg Arg Thr Gly Gly Phe Gly Glu Thr Ala His Phe
 20 25 30
 Arg Ala Val Gln Cys Arg Ala Phe Arg Leu Leu Pro Gly Ser Thr Phe
 35 40 45
 Asn Thr Val Tyr Leu Lys Ile Phe Pro Leu Ala Tyr Ser Leu Ala Ala
 50 55 60
 Ala His Phe Ala Glu Arg Trp Arg Ser Asp Leu Tyr Ala Pro Cys Ser
 65 70 75 80
 Phe Arg Asp Ser Ile Val Phe Phe Phe Thr Arg
 85 90

<210> 1157

<211> 426

<212> DNA

<213> Homo sapiens

<400> 1157

nnacagcctc tctcgaaccc ggcgggcggtt gcacacgtcc ccgtctgagg agtatctgtg
 60
 ctggcaaaac tcgtgacccg acacctgagg gcctatcggt tgcacgttgc cgtcatcatc
 120
 gttatgcagg tttcgccca aatcgcggcc ctgaccttgc caaccatcaa cgcagacatc
 180
 atcaacaagg gcgtcgtgac agcggatacc ggatatgtca ccaaccaatc cctcttcagt
 240
 ctggcggtcg ctttagggca ggccatctgc caggtcattg cggtttatct cgccgcgtcag
 300

gtggcgatgg gaatgggccc tgacgttcgc gacgccatct tcacccgcac ccttgacttc
 360
 tcggcccggg agatcaacaa attcggagca ccatcactca ttacccggac taccaacgac
 420
 gtccag
 426

<210> 1158
 <211> 123
 <212> PRT
 <213> Homo sapiens

<400> 1158
 Val Leu Ala Lys Leu Val Thr Arg His Leu Arg Ala Tyr Arg Leu His
 1 5 10 15
 Val Ala Val Ile Val Met Gln Val Cys Ala Gln Ile Ala Ala Leu
 20 25 30
 Thr Leu Pro Thr Ile Asn Ala Asp Ile Ile Asn Lys Gly Val Val Thr
 35 40 45
 Ala Asp Thr Gly Tyr Val Thr Thr His Ser Leu Phe Met Leu Ala Val
 50 55 60
 Ala Leu Gly Gln Ala Ile Cys Gln Val Ile Ala Val Tyr Leu Ala Ala
 65 70 75 80
 Gln Val Ala Met Gly Met Gly Arg Asp Val Arg Asp Ala Ile Phe Thr
 85 90 95
 Arg Thr Leu Asp Phe Ser Ala Arg Glu Ile Asn Lys Phe Gly Ala Pro
 100 105 110
 Ser Leu Ile Thr Arg Thr Thr Asn Asp Val Gln
 115 120

<210> 1159
 <211> 434
 <212> DNA
 <213> Homo sapiens

<400> 1159
 tctctccgac cgcgcctggg gcccggtggg gtctctgggg gacgcgggagc aggacgggagc
 60
 ggacgaggca ggagcaggcc gggctctcgc catgggtcac tgcgcctctc gccacgggaa
 120
 gtcttctctc agaagcctgc gcagcatctc cgagaggcg cctggagcga gcattggagag
 180
 gccatccgca gaggagcgcg tgctcgtaac ggacttccag cgcctgcttg gtgtggctgt
 240
 ccgcaggac cccaccttgt ctcgcttgt ctgcaagagc tgccacgccc agttctacca
 300
 gtgccacagc cttctcaagt cttcctgca gagggtcaac gcctccccgg ctggtgcgcc
 360
 gaagccttgt gcaaaggtcg gtgccagacc cccaacaggg gcagaggagg gagcgtgtgt
 420
 ggtggatctg atca
 434

<210> 1160

<211> 114
 <212> PRT
 <213> Homo sapiens

<400> 1160
 Met Gly His Cys Arg Leu Cys His Gly Lys Phe Ser Ser Arg Ser Leu
 1 5 10 15
 Arg Ser Ile Ser Glu Arg Ala Pro Gly Ala Ser Met Glu Arg Pro Ser
 20 25 30
 Ala Glu Glu Arg Val Leu Val Arg Asp Phe Gln Arg Leu Leu Gly Val
 35 40 45
 Ala Val Arg Gln Asp Pro Thr Leu Ser Pro Phe Val Cys Lys Ser Cys
 50 55 60
 His Ala Gln Phe Tyr Gln Cys His Ser Leu Leu Lys Ser Phe Leu Gln
 65 70 75 80
 Arg Val Asn Ala Ser Pro Ala Gly Arg Arg Lys Pro Cys Ala Lys Val
 85 90 95
 Gly Ala Gln Pro Pro Thr Gly Ala Glu Glu Gly Ala Cys Leu Val Asp
 100 105 110
 Leu Ile

<210> 1161
 <211> 355
 <212> DNA
 <213> Homo sapiens

<400> 1161
 ctgcacacac accaggccac gccacgagg acggccagtc agcatgcagc caatacacc
 60
 acagagggat ggggagcagc cctcagtgcc agctccaaca ggccactgc aggtcctgtc
 120
 actgcaccca aggagctgcc ttccatttca cctgacattt ccactaaggg cccagcggtt
 180
 atcattccag aagagcagca ggcagaacct tcacctccca agagctgcaa gtgcgctgtg
 240
 gcagaaaaag aagatctggc gtctgaagtc agctcctgct ctccagggaaa agagggagca
 300
 tgacatagga cttgagcaaa atgagagccc cgtgatggga gagaacacct gatca
 355

<210> 1162
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 1162
 Met Gln Pro Ile His Pro Gln Arg Asp Gly Glu Gln Pro Ser Val Pro
 1 5 10 15
 Ala Pro Thr Gly Pro Leu Gln Val Leu Ser Leu His Pro Arg Ser Cys
 20 25 30
 Leu Pro Phe His Leu Thr Phe Pro Leu Arg Ala Gln Arg Leu Ser Phe
 35 40 45
 Gln Lys Ser Ser Arg Gln Asn Leu His Leu Pro Arg Ala Ala Ser Ala

```

      50              55              60
Leu Trp Gln Glu Lys Lys Ile Trp Arg Leu Lys Ser Ala Pro Ala Leu
65              70              75              80
Gln Glu Lys Arg Asp Asp Ile Gly Leu Glu Gln Asn Glu Ser Pro
      85              90              95
Val Met Gly Glu Asn Thr
      100

```

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<210> 1163
<211> 466
<212> DNA
<213> Homo sapiens

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<400> 1163
ngcgcgccag gaagcgggag gtcagctgta caccaggggt aatagaacct ctaccctcag
60
aggagtcaaa gagaaggcag aactatggca ggaaagctcc ggaagtccca catccctgga
120
gtgagcatct ggcagctggg ggaggagatc cctgaagggt gcagcacgcc ggactttgag
180
cagaagcccg tcacctcgcc tctgccagag gggaaaaaatg ctgtctttcg ggctgtgggc
240
tgtgggggagc ccaggcccgga ggtgcgttgg cagaactcca aaggtgacct cagtgtattcc
300
agcaagtaca agatctcttc cagccctggc agcaaggagc acgtgctgca gatcaacaag
360
ctgacaggcg aggacacgga tctgtaccac tgcacagcag taaatgcgta cggagaggcc
420
gcttgctcag tgagactcac cgctcatcgaa gttggctttc ggaaga
466

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<210> 1164
<211> 127
<212> PRT
<213> Homo sapiens

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<400> 1164
Met Ala Gly Lys Leu Arg Lys Ser His Ile Pro Gly Val Ser Ile Trp
1      5      10      15
Gln Leu Val Glu Glu Ile Pro Glu Gly Cys Ser Thr Pro Asp Phe Glu
20      25      30
Gln Lys Pro Val Thr Ser Ala Leu Pro Glu Gly Lys Asn Ala Val Phe
35      40      45
Arg Ala Val Val Cys Gly Glu Pro Arg Pro Glu Val Arg Trp Gln Asn
50      55      60
Ser Lys Gly Asp Leu Ser Asp Ser Ser Lys Tyr Lys Ile Ser Ser Ser
65      70      75      80
Pro Gly Ser Lys Glu His Val Leu Gln Ile Asn Lys Leu Thr Gly Glu
85      90      95
Asp Thr Asp Leu Tyr His Cys Thr Ala Val Asn Ala Tyr Gly Glu Ala
100      105      110
Ala Cys Ser Val Arg Leu Thr Val Ile Glu Val Gly Phe Arg Lys
115      120      125

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<210> 1165
 <211> 414
 <212> DNA
 <213> Homo sapiens

<400> 1165
 tgggtgggttc cggacacana aaatcacgtg ttgaaccgaa ttccaggcat ggtgaaaggc
 60
 tgcttttagta aagtccctgt tgagccgcgt ctgctcaagc tcaacttgac nattatgtgt
 120
 tgcacattc tgctgatgtc caggttcgtg gccctgcccg gtcagttggc tgcagcagga
 180
 ttcccccgcg ctgaacactg gaaagtgtat ctgggtgacga tgcctcatctc ctctgtctcc
 240
 gttgtccctt tcattatcta tgcagaagtg aaacgccgca tgaagcgcgt attcctgacg
 300
 tgtgttgccg tgctgttgat tgcgaaatc gtactatggg gctccggtcc acacttctgg
 360
 gaactgggtca tggcggtaca gctttttcttc ctgccttta atctcatgga agcc
 414

<210> 1166
 <211> 138
 <212> PRT
 <213> Homo sapiens

<400> 1166
 Trp Val Val Pro Asp Thr Xaa Asn His Val Leu Asn Arg Ile Ser Gly
 1 5 10 15
 Met Val Lys Gly Cys Phe Ser Lys Val Leu Val Glu Pro Arg Leu Leu
 20 25 30
 Lys Leu Asn Leu Thr Ile Met Cys Leu His Ile Leu Leu Met Ser Thr
 35 40 45
 Phe Val Ala Leu Pro Gly Gln Leu Ala Ala Ala Gly Phe Pro Ala Ala
 50 55 60
 Glu His Trp Lys Val Tyr Leu Val Thr Met Leu Ile Ser Phe Val Ser
 65 70 75 80
 Val Val Pro Phe Ile Ile Tyr Ala Glu Val Lys Arg Arg Met Lys Arg
 85 90 95
 Val Phe Leu Thr Cys Val Ala Leu Leu Leu Ile Ala Glu Ile Val Leu
 100 105 110
 Trp Gly Ser Gly Pro His Phe Trp Glu Leu Val Ile Gly Val Gln Leu
 115 120 125
 Phe Phe Leu Ala Phe Asn Leu Met Glu Ala
 130 135

<210> 1167
 <211> 464
 <212> DNA
 <213> Homo sapiens

<400> 1167
 gtccgaccccg tgggcaagag tcgcggtccc tgacgataac ttaccgccgc cggccttgag
 60

ctgttggggac cggctgggcta aggcctgggc accggtagcg gcctggtgga taccctcatg
 120
 tagccgggtg acctgcctga ccatcttcgg caaaccagtg cgcagttgtg tggggaactc
 180
 attgaccctt cgagacagtc gtgaggaacc gtcagcaagt tcgtcgatgc cgtcgtcgat
 240
 gctcttgcca gagttcggat ccttgatcgc catcgcttg acggccaccc ccgaccacgc
 300
 ccgcacgccc agggcgtacc catcggtcat cgcgtcgcg acgatgggta ccaggctcgtg
 360
 gcattctcgc gcggtgtggc ttgcgacgca tcgacgcagg aagtcagcct cgcctccggga
 420
 cagggcttcc ttactaagtt ccgcgggttt ctttcccgac gcgt
 464

<210> 1168

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1168

Met	Thr	Asp	Gly	Tyr	Ala	Leu	Gly	Val	Arg	Ala	Gly	Ser	Gly	Val	Ala
1			5					10					15		
Val	Lys	Ala	Met	Ala	Ile	Lys	Asp	Pro	Asn	Ser	Gly	Lys	Ser	Ile	Asp
			20					25				30			
Asp	Gly	Ile	Asp	Glu	Leu	Ala	Asp	Gly	Ser	Ser	Arg	Leu	Ser	Arg	Gly
			35				40				45				
Val	Asn	Glu	Phe	Thr	Thr	Gln	Leu	Arg	Thr	Gly	Leu	Pro	Lys	Met	Val
	50				55					60					
Arg	Gln	Val	Thr	Arg	Leu	His	Glu	Gly	Ile	His	Gln	Ala	Ala	Thr	Gly
	65				70				75				80		
Ala	Gln	Ala	Leu	Ala	Ser	Arg	Ser	Gln	Gln	Leu	Lys	Ala	Gly	Gly	Val
			85					90					95		
Lys	Leu	Ser	Ser	Gly	Ala	Ala	Thr	Leu	Ala	His	Gly	Val	Asp		
			100					105					110		

<210> 1169

<211> 486

<212> DNA

<213> Homo sapiens

<400> 1169

nacgcgtgaa gggagcagaa cggacaccag ttactagtgg ctctggctgg ggacagccct
 60
 cttaggcctt tctggccaat gggaaacagga atagcccggg gctttctagc tgctatggac
 120
 tcgacctgga tggtcggaag ttggtctcta ggaacgagcc ctttggaagt gctggcagag
 180
 agggaaagta tttacaggtt gctgcctcag accacccttg agaatgtgag taagaacttc
 240
 agccagtaca gtatcgacct gtgcaactcg tatccaata tcaacgtcaa cttcctccgg
 300
 ccaagccagg tgcgccattt atatgatact ggcgaaacaa aagatattca cctggaaatg
 360

gagagcctgg tgaattcccg aaccaccccc aaattgactc gcaatgagtc tgtagctcgt
 420
 tcaagcaaac tgctgggttg gtgccagagg cagacagatg gctatgcagg ggtaaacgtg
 480
 acagat
 486

<210> 1170

<211> 159

<212> PRT

<213> Homo sapiens

<400> 1170

Arg	Glu	Gln	Asn	Gly	His	Gln	Leu	Leu	Val	Ala	Leu	Val	Gly	Asp	Ser
1			5						10					15	
Leu	Leu	Glu	Pro	Phe	Trp	Pro	Met	Gly	Thr	Gly	Ile	Ala	Arg	Gly	Phe
			20					25					30		
Leu	Ala	Ala	Met	Asp	Ser	Ala	Trp	Met	Val	Arg	Ser	Trp	Ser	Leu	Gly
		35					40					45			
Thr	Ser	Pro	Leu	Glu	Val	Leu	Ala	Glu	Arg	Glu	Ser	Ile	Tyr	Arg	Leu
		50				55				60					
Leu	Pro	Gln	Thr	Thr	Pro	Glu	Asn	Val	Ser	Lys	Asn	Phe	Ser	Gln	Tyr
65			70						75					80	
Ser	Ile	Asp	Pro	Val	Thr	Arg	Tyr	Pro	Asn	Ile	Asn	Val	Asn	Phe	Leu
			85					90					95		
Arg	Pro	Ser	Gln	Val	Arg	His	Leu	Tyr	Asp	Thr	Gly	Glu	Thr	Lys	Asp
			100				105						110		
Ile	His	Leu	Glu	Met	Glu	Ser	Leu	Val	Asn	Ser	Arg	Thr	Thr	Pro	Lys
		115				120						125			
Leu	Thr	Arg	Asn	Glu	Ser	Val	Ala	Arg	Ser	Ser	Lys	Leu	Leu	Gly	Trp
		130				135					140				
Cys	Gln	Arg	Gln	Thr	Asp	Gly	Tyr	Ala	Gly	Val	Asn	Val	Thr	Asp	
145					150						155				

<210> 1171

<211> 429

<212> DNA

<213> Homo sapiens

<400> 1171

acgcgttcaa caaagcacag aaccggagat gcagtgggag ccgagagcag gaagcgcgga
 60
 ggcagcgcca ggtgctggcg ctgcccgagg ccccggtcca agtggggccc atagcagcgg
 120
 actcgttaga cccctccaaa acgcacacca cgcgcgacca ggaccgagag gccgcacgg
 180
 ccttcttagg ccacaaacac tccactgtct ccagggtaaa agacaaacac agcctcgctt
 240
 gtccctccaa gagtacaacc tctgtctgat gaaaaacaaa cgaccagag agggaggcgc
 300
 tgccgggaca ctgcaggctg ggcccgcgcg gcccttgagg ggcaggtcaa aatcccggaa
 360
 caggcacagt gttcaggctg attgactgtc ccaggccagg gcggcctcaa ctgcagagac
 420

acctcctac
429

<210> 1172
<211> 118
<212> PRT
<213> Homo sapiens

<400> 1172
Met Gln Trp Glu Pro Arg Ala Gly Ser Ala Glu Ala Ala Pro Gly Ala
1 5 10 15
Gly Ala Ala Arg Gly Pro Val Pro Ser Gly Ala His Ser Ser Arg Leu
20 25 30
Ala Arg Pro Ser Gln Asn Ala His His Ala Arg Pro Gly Pro Arg Gly
35 40 45
Pro His Gly Pro Ala Arg Pro Gln Thr Leu His Cys Leu Gln Gly Lys
50 55 60
Arg Gln Thr Gln Pro Arg Leu Ser Leu Gln Glu Tyr Asn Leu Cys Leu
65 70 75 80
Met Lys Asn Lys Arg Pro Arg Glu Glu Ala Ala Gly Thr Leu Gln
85 90 95
Ala Gly Pro Ala Ala Pro Leu Glu Gly Arg Ser Lys Ser Arg Asn Arg
100 105 110
His Ser Val Gln Ala Asp
115

<210> 1173
<211> 435
<212> DNA
<213> Homo sapiens

<400> 1173
cgcgtaaatg acgacggcga gcattctgcc gagcagggtga tgcgagccac ccgcggtgct
60
ggacttgggg ccgaggccaa gcgtcgcatc atcttgggta cctatgcctt gtcggtggg
120
tactatgacg cctactacgg ctcggtcag aaagtcgta cctcatcca acgcgacttc
180
gagaaagcat ggcagatgtg cgatgtgctc gtgtcaccgg ccacgccaac gactgccttc
240
cggctgggtg agcgtactgc tgacccgatg gcgatgtacc gctccgatct atgcacggtc
300
ccggccaata tggccggaag tccgcagga tctttccga tcggtctatc agagaccgac
360
ggcatgcccg tcggcatgca ggtgatggcg ccaatcatgg cggacgatcg aatctaccga
420
gttggggccg ctcta
435

<210> 1174
<211> 145
<212> PRT
<213> Homo sapiens

<400> 1174

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Arg Val Asn Asp Asp Gly Glu His Ser Ala Glu Gln Val Met Arg Ala
 1           5           10           15
Thr Arg Gly Ala Gly Leu Gly Ala Glu Ala Lys Arg Arg Ile Ile Leu
      20           25           30
Gly Thr Tyr Ala Leu Ser Ala Gly Tyr Tyr Asp Ala Tyr Tyr Gly Ser
      35           40           45
Ala Gln Lys Val Arg Thr Leu Ile Gln Arg Asp Phe Glu Lys Ala Trp
      50           55           60
Gln Met Cys Asp Val Leu Val Ser Pro Ala Thr Pro Thr Thr Ala Phe
65           70           75           80
Arg Leu Gly Glu Arg Thr Ala Asp Pro Met Ala Met Tyr Arg Ser Asp
      85           90           95
Leu Cys Thr Val Pro Ala Asn Met Ala Gly Ser Pro Ala Gly Ser Phe
      100          105          110
Pro Ile Gly Leu Ser Glu Thr Asp Gly Met Pro Val Gly Met Gln Val
      115          120          125
Met Ala Pro Ile Met Ala Asp Asp Arg Ile Tyr Arg Val Gly Ala Ala
      130          135          140
Leu
145

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<210> 1175

<211> 729

<212> DNA

<213> Homo sapiens

<400> 1175

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gacgcacatg caatccaccc acatctactt gatatgaaaa ttggtcaagg caaatatgag
60
caggggttct ttccaaagt acagtcgat gtcttggaac caggaccaac cagtaacaat
120
cgctgggtaa gtcggagtgc cactgcacag cgcaggaaag gacgccttcg ccagcattct
180
gagcatgttg ggctggacaa cgacttgagg gagaaatata tgcaagaggc acgaagttaa
240
ggaaaaaac tgaggcaacc caaactgtca gacctctctc ctgcagttat tgacagagcc
300
aaactgtaat tcgtagaagg cttattaaaa gaattgagaa ataagacaaa gcgcagtgtg
360
gtggagaaga tgggacatga agcgggtgaa cttggccatg gagaagcaaa catcacccgc
420
ctggaggaga acaccttgat cgccagcctt tgtacctgc tggagaggat atggagccat
480
ggcttcagg tcaagcagg gaagtgggtt ttgtggtcac atttaattcc ttttcaggac
540
agagaagaga accaagagcc ccttgacaga tcaccagttg cctcggacc agaaagaaaa
600
aaatctgact caggagttaa gttgccaacg ctcagggtct ctcttattca ggacatgagg
660
catattcaaa acatgagtga gatcaagact gatgttgagg gagctcgggc gtggataaga
720
ctgtctcta
729

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<210> 1176
 <211> 243
 <212> PRT
 <213> Homo sapiens

<400> 1176
 Asp Arg Thr Ala Ile His Pro His Leu Leu Asp Met Lys Ile Gly Gln
 1 5 10 15
 Gly Lys Tyr Glu Gln Gly Phe Phe Pro Lys Leu Gln Ser Asp Val Leu
 20 25 30
 Ala Thr Gly Pro Thr Ser Asn Asn Arg Trp Val Ser Arg Ser Ala Thr
 35 40 45
 Ala Gln Arg Arg Lys Gly Arg Leu Arg Gln His Ser Glu His Val Gly
 50 55 60
 Leu Asp Asn Asp Leu Arg Glu Lys Tyr Met Gln Glu Ala Arg Ser Leu
 65 70 75 80
 Gly Lys Asn Leu Arg Gln Pro Lys Leu Ser Asp Leu Ser Pro Ala Val
 85 90 95
 Ile Ala Gln Thr Asn Cys Lys Phe Val Glu Gly Leu Leu Lys Glu Cys
 100 105 110
 Arg Asn Lys Thr Lys Arg Met Leu Val Glu Lys Met Gly His Glu Ala
 115 120 125
 Val Glu Leu Gly His Gly Glu Ala Asn Ile Thr Gly Leu Glu Glu Asn
 130 135 140
 Thr Leu Ile Ala Ser Leu Cys Asp Leu Leu Glu Arg Ile Trp Ser His
 145 150 155 160
 Gly Leu Gln Val Lys Gln Gly Lys Ser Val Leu Trp Ser His Leu Ile
 165 170 175
 Pro Phe Gln Asp Arg Glu Glu Asn Gln Glu Pro Leu Ala Glu Ser Pro
 180 185 190
 Val Ala Leu Gly Pro Glu Arg Lys Lys Ser Asp Ser Gly Val Met Leu
 195 200 205
 Pro Thr Leu Arg Val Ser Leu Ile Gln Asp Met Arg His Ile Gln Asn
 210 215 220
 Met Ser Glu Ile Lys Thr Asp Val Gly Arg Ala Arg Ala Trp Ile Arg
 225 230 235 240
 Leu Ser Leu

<210> 1177
 <211> 581
 <212> DNA
 <213> Homo sapiens

<400> 1177
 acgcgtgatg agttgogcga gaccagcaac tgcagccgaa tacagttttc ttgtgtacc
 60
 cgctgcacag ctgcgagagg tgggcattgc cgagtggagg aacgatgtct aaggcggaaa
 120
 gctcaccctc ggcagacggg aagactttgt cgtcggggat gttgtcaatg agagcgggga
 180
 cgtcgatctc ggtactgccc atggcgctcat gaaggatcgc gcgatacggg gcgacgaccc
 240

cgatgagggc gtcgtcgaat ccagcgatga tcgataccctc tctcggtagc acgtccgtgg
 300
 ccaacagggtg gtcgacttgg gcgggggcta gccatgtaat tgttccgagc acatggaggg
 360
 tgggtgccag gagggcgatg gccggttctg gggcatcttt ggagatcttc agccggacat
 420
 cagtgggcag tccggccggg acttggcaga gggcctgggc gggatgggag cgctggggcga
 480
 cgacgaaacg ccccgacgcc gtaacgcgt gggcttggag atcgcaggtc cacttctctg
 540
 ggctttcacc ggcagagatc atgggtgtgga ccaccattgt g
 581

<210> 1178

<211> 192

<212> PRT

<213> Homo sapiens

<400> 1178

Met	Val	Val	His	Thr	Met	Ile	Ser	Ala	Gly	Glu	Ser	Pro	Glu	Lys	Trp
1			5						10				15		
Thr	Cys	Asp	Leu	Gln	Ala	His	Gly	Val	Thr	Ala	Ser	Gly	Arg	Phe	Val
			20					25					30		
Val	Ala	Gln	Arg	Ser	His	Pro	Ala	Gln	Ala	Leu	Cys	Gln	Val	Pro	Ala
			35				40					45			
Gly	Leu	Pro	Thr	Asp	Val	Arg	Leu	Lys	Ile	Ser	Lys	Asp	Ala	Pro	Glu
	50				55				60						
Pro	Ala	Ile	Arg	Leu	Leu	Ala	Ala	Thr	Leu	His	Val	Leu	Gly	Thr	Ile
65				70					75					80	
Thr	Trp	Leu	Ala	Pro	Ala	Gln	Val	Asp	His	Leu	Leu	Ala	Thr	Asp	Val
			85					90						95	
Leu	Pro	Arg	Glu	Val	Ser	Ile	Ile	Ala	Gly	Phe	Asp	Asp	Ala	Leu	Ile
			100					105					110		
Gly	Val	Val	Ala	Pro	Tyr	Arg	Ala	Ile	Leu	His	Asp	Ala	Met	Gly	Ser
			115				120					125			
Thr	Glu	Ile	Asp	Val	Pro	Ala	Leu	Ile	Asp	Asn	Ile	Pro	Asp	Asp	Lys
	130						135					140			
Val	Phe	Pro	Ser	Ala	Glu	Asp	Glu	Leu	Ser	Ala	Leu	Asp	Ile	Val	Ala
				150					155					160	
Ser	Leu	Gly	Asn	Ala	His	Leu	Ser	Gln	Leu	Cys	Asp	Gly	Val	His	Lys
			165						170					175	
Lys	Thr	Val	Phe	Gly	Cys	Ser	Cys	Trp	Ser	Arg	Ala	Thr	His	His	Ala
			180					185						190	

<210> 1179

<211> 597

<212> DNA

<213> Homo sapiens

<400> 1179

gtgcactttc tggcttctaa ctgtggcccc agccctgact ccttgagggtg ctctctgtgt
 60
 gattgggggt cctggacatg ctgccacaag atgtctggaa actccagggg gcacctgccg
 120

agacctctgcc ctgggaacgg ccggaagaat cccaaacat gagattccgg tgcagctgag
 180
 ccccgccaat tcattgtctc ttccagtcgc ttctgaaggc tgcatttggc aatgtgaccc
 240
 tcgggggtggg gaaggcatca gaggaatata ggctatggga cggcagaggc agcgtctctg
 300
 ggacaaagcc cacttcttcc catgcccagg gcttctcat ggaccagca tgggtgagct
 360
 ggccctcaga cgtccatggg tgggtggggga ggcacgtgct gtttggccct gtctctgctc
 420
 agagtctcat aggaagatgc atgtccaca caacagttag tcggcaggga gtccaggctt
 480
 cccctcccaa ccagtgggtg tgagacgctt ggtttataac ccaagatccc ttgtcccat
 540
 ggtgcctcct gaattctcca cctcccgagg cacctgcatg gcctctacct gacgcgt
 597

<210> 1180

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1180

Met	Gly	Arg	Gln	Arg	Gln	Arg	Pro	Gly	Asp	Lys	Ala	His	Phe	Phe	Pro
1			5						10				15		
Cys	Pro	Gly	Leu	Pro	His	Gly	Pro	Ser	Met	Val	Asp	Val	Ala	Leu	Arg
			20						25				30		
Arg	Pro	Trp	Val	Val	Gly	Glu	Ala	Arg	Ala	Val	Trp	Pro	Cys	Leu	Cys
			35				40					45			
Ser	Glu	Ser	His	Arg	Lys	Met	His	Gly	Pro	His	Asn	Ser	Glu	Ser	Ala
	50					55					60				
Gly	Ser	Pro	Gly	Phe	Pro	Ser	Gln	Pro	Val	Val	Leu	Arg	Arg	Leu	Val
	65				70				75					80	
Tyr	Asn	Pro	Arg	Ser	Leu	Val	Pro	Leu	Val	Pro	Pro	Glu	Ser	Pro	Thr
			85					90					95		
Ser	Arg	Gly	Thr	Cys	Met	Ala	Ser	Thr							
			100					105							

<210> 1181

<211> 352

<212> DNA

<213> Homo sapiens

<400> 1181

gtgactacc tcatgtttc ccgcgctcag atggtctcgg tggctactgc catgattccg
 60
 ttctcagcgc acgacgacgc taacctgtcc ctgatgggtg cgaacatgca gcgtcagggt
 120
 gtgcgctgct tgcgttcgga ggctccgttc gtcggtaccg gtatggagca gcgtgctgct
 180
 taagacgccc gcatgtcat tgtcgcttcg gccacagggt tggctcgagac cgtctcggca
 240
 ggcttcatca ccatcatgga cgatgagggc cagcgccaca cctacctgct gcgcaagttc
 300

gagcgcacca accagggcac ctgctacaac cagaagccac tgttgacgag gg
352

<210> 1182

<211> 117

<212> PRT

<213> Homo sapiens

<400> 1182

Val	Asp	Tyr	Leu	Asp	Val	Ser	Pro	Arg	Gln	Met	Val	Ser	Val	Ala	Thr
1				5					10					15	
Ala	Met	Ile	Pro	Phe	Leu	Glu	His	Asp	Asp	Ala	Asn	Arg	Ala	Leu	Met
			20					25					30		
Gly	Ala	Asn	Met	Gln	Arg	Gln	Ala	Val	Pro	Leu	Leu	Arg	Ser	Glu	Ala
	35					40						45			
Pro	Phe	Val	Gly	Thr	Gly	Met	Glu	Gln	Arg	Ala	Ala	Tyr	Asp	Ala	Gly
	50					55						60			
Asp	Val	Ile	Val	Ala	Ser	Ala	Thr	Gly	Val	Val	Glu	Thr	Val	Ser	Ala
	65				70				75					80	
Gly	Phe	Ile	Thr	Ile	Met	Asp	Asp	Glu	Gly	Gln	Arg	His	Thr	Tyr	Leu
				85				90					95		
Leu	Arg	Lys	Phe	Glu	Arg	Thr	Asn	Gln	Gly	Thr	Cys	Tyr	Asn	Gln	Lys
			100					105					110		
Pro	Leu	Leu	Thr	Arg											
			115												

<210> 1183

<211> 432

<212> DNA

<213> Homo sapiens

<400> 1183

gattccttctg ggcgctggtc caagcgcgtg gtgaggccgt cctctcctgc agaaccctgg
60
cctcttcgcc cctgcccgt cactgtttct gtctctctca cctctctcag gaagcctggc
120
tggccttctc catgtgatg ggcgaggccc ttgtccctgc agccatgcac tgacctccgt
180
ggctcctgga ggccaggcca cgtctctcat cctctctgggt gaggtagagg cacagcctgg
240
gtgcgtgggg ccgtggcgcc tccgaggcgc caccgctgtg tctctctatg agtgggtggc
300
gtccaggctct gtctctgggt ggctgcgagg aggaggttgg cctcgcgcgg ccatgtgcgt
360
gacagtggag acatgccccag cctcctgctt gcacagctga cggcagcccc tctctctcca
420
gccatgtccc ca
432

<210> 1184

<211> 141

<212> PRT

<213> Homo sapiens

<400> 1184

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Met Ala Gly Glu Arg Gly Ala Ala Val Ser Cys Ala Ser Arg Arg Leu
 1           5           10           15
Ala Met Ser Pro Leu Ser Arg Thr Trp Pro Arg Glu Ala Asn Leu Leu
      20           25           30
Leu Ala Ala Ser Pro Gly Gln Thr Trp Thr Ala Pro Thr His Glu Arg
    35           40           45
Thr Gln Arg Trp Arg Leu Gly Ala Ala Thr Ala Pro Arg Thr Gln Ala
    50           55           60
Val Pro Leu Thr His Pro Glu Gly Met Arg Thr Trp Pro Gly Leu Gln
    65           70           75           80
Glu Pro Arg Arg Ser Met His Gly Cys Arg Asp Lys Gly His Ala His
      85           90           95
Gln His Gly Glu Gly Gln Ala Gly Phe Leu Glu Glu Val Ser Arg Thr
    100           105           110
Glu Gln Val Ser Gly Gln Gly Arg Arg Gly Arg Gly Ser Ala Gly Glu
    115           120           125
Asp Gly Leu Thr Thr Arg Leu Asp Gln Arg Pro Glu Gly
    130           135           140

```

<210> 1185

<211> 423

<212> DNA

<213> Homo sapiens

<400> 1185

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accggtgaat ttggccttaa cagcgatgga actcctggcc catcttatga acctggcatg
60
gaattacgag gcaaatatgt attgttgggt gaaggtgtac ggggctctct atctaaacaa
120
gtcatcaata aataccaatt atccgagggt catgaaccac aaaagttcgg ccttggctta
180
aaagaaattt gggaaataga ccagaaaaaa cacaaagaag gcagagtcag tcataccatg
240
ggctggccat taaatggcaa tgctggcggc ggttctttta tttatcatgc agaaaacaat
300
caagctttta tcggctttgt ggtgcatctt aattacgcca acccttaact atccccttac
360
caagaatttc aacgctttta acaccatccg attatcgcgg agctattaac tggcggtaaa
420
cgc
423

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<210> 1186

<211> 141

<212> PRT

<213> Homo sapiens

<400> 1186

```

Thr Gly Glu Phe Gly Leu Asn Ser Asp Gly Thr Pro Gly Pro Ser Tyr
 1           5           10           15
Glu Pro Gly Met Glu Leu Arg Gly Lys Tyr Val Leu Leu Gly Glu Gly
    20           25           30
Val Arg Gly Ser Leu Ser Lys Gln Val Ile Asn Lys Tyr Gln Leu Ser

```

```

      35              40              45
Glu Gly His Glu Pro Gln Lys Phe Gly Leu Gly Leu Lys Glu Ile Trp
  50              55              60
Glu Ile Asp Pro Glu Lys His Lys Glu Gly Arg Val Ser His Thr Met
  65              70              75              80
Gly Trp Pro Leu Asn Gly Asn Ala Gly Gly Gly Ser Phe Ile Tyr His
      85              90              95
Ala Glu Asn Asn Gln Val Phe Ile Gly Phe Val Val His Leu Asn Tyr
      100              105              110
Ala Asn Pro Tyr Leu Ser Pro Tyr Gln Glu Phe Gln Arg Phe Lys His
      115              120              125
His Pro Ile Ile Ala Glu Leu Leu Thr Gly Gly Lys Arg
      130              135              140

```

<210> 1187

<211> 387

<212> DNA

<213> Homo sapiens

<400> 1187

```

acgcgtgctg gtgagtttaa attgaatgct gatggtaatt tggtagacgaa ttcaggggct
  60
aagggtccagg gctataatgc aatagatggc atagtcgggtg ggaacttaga agatatggta
  120
gtaccacctg ctcgaatttc tcctcaagca acatcaagtg ttgattttaa agtgaatctt
  180
aattccgaag gtgaggatgt gccgccttat attcgagcgg actttgatcc agccaatcca
  240
gatacttatg actatactca gacccaaacg gttgcggatg ggagtggtaa taatcattta
  300
attagttatt actatgctaa aagtgatgta gcaaatacct atcagggtta tgccacggta
  360
gatgggaagt cgactgatga taccgggt
  387

```

<210> 1188

<211> 129

<212> PRT

<213> Homo sapiens

<400> 1188

```

Thr Arg Ala Gly Glu Phe Lys Leu Asn Ala Asp Gly Asn Leu Val Thr
  1              5              10              15
Asn Ser Gly Ala Lys Val Gln Gly Tyr Asn Ala Ile Asp Gly Ile Val
      20              25              30
Gly Gly Asn Leu Glu Asp Met Val Val Pro Thr Ala Arg Ile Ser Pro
      35              40              45
Gln Ala Thr Ser Ser Val Asp Leu Lys Val Asn Leu Asn Ser Glu Gly
      50              55              60
Glu Asp Val Pro Pro Tyr Ile Arg Ala Asp Phe Asp Pro Ala Asn Pro
      65              70              75              80
Asp Thr Tyr Asp Tyr Thr Gln Thr Gln Thr Val Ala Asp Gly Ser Gly
      85              90              95
Asn Asn His Leu Ile Ser Tyr Tyr Tyr Ala Lys Ser Asp Val Ala Asn

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100 105 110
 Thr Tyr Gln Val Thr Ala Thr Val Asp Gly Lys Ser Thr Asp Asp Thr
 115 120 125
 Gly

<210> 1189
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 1189
 tcgatcgccg accgccggg ccttgccccc ggcgatgatcg gtggcctgtt ggccagcacc
 60
 ctgggtgctg gtttcattgg cggcatcggt gcaggttttc tggccgggta cagcgccaag
 120
 gccattgccc gctgggcacg gctgccacgc agcctggatg cgctcaaacg gattctgatc
 180
 atttcgctgc tggccagcct gttcactggg ttggtgatga tctacgtggt cggccagccg
 240
 gtggcggcca tgctcggagg cctgacacac tttctcgaca gcatgggtac caccaacgcc
 300
 attctcctgg gcntgttgct cggcgggctag
 330

<210> 1190
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 1190
 Ser Ile Ala Asp Arg Pro Gly Leu Ala Pro Gly Met Ile Gly Gly Leu
 1 5 10 15
 Leu Ala Ser Thr Leu Gly Ala Gly Phe Ile Gly Gly Ile Val Ala Gly
 20 25 30
 Phe Leu Ala Gly Tyr Ser Ala Lys Ala Ile Ala Arg Trp Ala Arg Leu
 35 40 45
 Pro Ser Ser Leu Asp Ala Leu Lys Pro Ile Leu Ile Ile Ser Leu Leu
 50 55 60
 Ala Ser Leu Phe Thr Gly Leu Val Met Ile Tyr Val Val Gly Gln Pro
 65 70 75 80
 Val Ala Ala Met Leu Gly Gly Leu Thr His Phe Leu Asp Ser Met Gly
 85 90 95
 Thr Thr Asn Ala Ile Leu Leu Gly Xaa Leu Leu Gly Gly
 100 105

<210> 1191
 <211> 351
 <212> DNA
 <213> Homo sapiens

<400> 1191
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 60

gcaggggacta acggacagac catgcagaca ccgccggtgg tgtcgccgca ggactgggag
 120
 gcagcccgctc agcaactgct cgtgaaggaa aaggcgcata ccggtgcccg cgacgcactc
 180
 gccgcccgaac ggaggcgcat gccgtggatg gaagtgcaca aaacctacgc attcgaggcg
 240
 ccctcgggca agggcagctc gctcgatctg ttccagggcc ggaagcagct gatactgtac
 300
 cgggccttct tcgagccggg cgtgttcggc tggcccgacc atgcctgccg c
 351

<210> 1192
 <211> 114
 <212> PRT
 <213> Homo sapiens

<400> 1192
 Met Cys Gly Glu Gln Ile Trp Arg Ala Met Met Thr Ser Ala Asp
 1 5 10 15
 Lys Ala Gly Thr Asn Gly Gln Thr Met Gln Thr Pro Pro Val Val Ser
 20 25 30
 Pro Gln Asp Trp Glu Ala Ala Arg Gln Gln Leu Leu Val Lys Glu Lys
 35 40 45
 Ala His Thr Arg Ala Arg Asp Ala Leu Ala Ala Glu Arg Arg Arg Met
 50 55 60
 Pro Trp Met Glu Val Thr Lys Thr Tyr Ala Phe Glu Ala Pro Ser Gly
 65 70 75 80
 Lys Ala Ser Leu Leu Asp Leu Phe Gln Gly Arg Lys Gln Leu Ile Leu
 85 90 95
 Tyr Arg Ala Phe Phe Glu Pro Gly Val Phe Gly Trp Pro Asp His Ala
 100 105 110
 Cys Arg

<210> 1193
 <211> 722
 <212> DNA
 <213> Homo sapiens

<400> 1193
 ggatccagac ctccagatcc catctttagt ctcttcttctc tctacactna ggttgctccc
 60
 cgacttagga cgcccagttt gtactcagtg tttgctcttt tatggcagag cctctgcact
 120
 cccagcctcc tggcccttct tgtacatgat ttctcttctg gccactccat gcatttttct
 180
 tggctcagga cttagtgggc ctccatggga cttgggtacct ctacttcttc ccttctggaa
 240
 tctgtaactt tgtgttcccc accattcttt cctttatgaa ccgatgggtgc aacagcatga
 300
 ctacctgaaa tctcttagtca ctcccagctg ctttagtgga gggaaaatgc ccacagcaca
 360
 ggaaaatagtc tgcctcttcg agagaggcca ggggatggga gcgtgtccag agaaggcgga
 420

tgggttgatg aaggggtggcc acagcgcccc ggaggaaggg gccagaacgc tctctgttct
 480
 gttccatgag gaggattatg ttggtgtgtg tagtcccctg gttcagagtt gtccagaaat
 540
 agctcagtgt aaggaacaat tttccaaaga tcaaaagagc tgttccaaga tagcagtgcg
 600
 tccccagccc ctacaggtgt atacagcaca aagggaagga cccccagtgt tggctgtcac
 660
 agagggaagt ggacgtcctg tggtttgacc ccaccagatg gctttagaga tctgggcccc
 720
 ag
 722

<210> 1194
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 1194
 Met Val Gln Gln His Asp Tyr Leu Lys Phe Leu Val Thr Pro Ser Cys
 1 5 10 15
 Phe Ser Gly Gly Lys Met Pro Thr Ala Gln Glu Ile Val Leu Pro Phe
 20 25 30
 Glu Arg Gly Gln Gly Met Gly Ala Cys Pro Glu Lys Gly Asp Gly Leu
 35 40 45
 Met Lys Gly Gly His Ser Ala Arg Glu Glu Gly Ala Arg Thr Leu Ser
 50 55 60
 Val Leu Phe His Glu Glu Asp Tyr Val Gly Val Cys Ser Pro Leu Val
 65 70 75 80
 Gln Ser Cys Pro Glu Ile Ala Gln Cys Lys Glu Gln Phe Ser Lys Asp
 85 90 95
 Gln Lys Ser Cys Leu Lys Ile Ala Val Arg Ser Gln Pro Leu Gln Val
 100 105 110
 Tyr Thr Ala Gln Arg Glu Gly Pro Pro Ser Val Ala Val Thr Glu Gly
 115 120 125
 Ser Gly Arg Pro Val Val
 130

<210> 1195
 <211> 391
 <212> DNA
 <213> Homo sapiens

<400> 1195
 tctagagcat gatattccgc gggcgcgggc ggggtgacct tgggttcgaga gtggaactaa
 60
 gtgagtaatg gggcgcggcg gccagacgc gctccacgcc tcctgcgagc agtgtgcgcc
 120
 ggtttcccg gggcacggga gtgtgtctag gaggggaggc caggatcctt cctcagagtc
 180
 tctctgaac aaaagaaaac gaggtgggtg gtgcttgaaac ggcctgtttt actctgcaga
 240
 tagcgcaagt ggtaggactc cggcgcgccc tatttatctt gattggctct gcctgaaggg
 300

aagcggttaat cccgtccaac ctgtatcact gcgaagagct cggtcgggag cgctttttgg
 360
 aaatgcagat tcttagcccc caccagatc t
 391

<210> 1196
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 1196
 Met Gly Ala Ala Arg Pro Asp Ala Leu Pro Ala Ser Trp Arg Glu Cys
 1 5 10 15
 Cys Pro Val Ser Arg Gly His Gly Ser Val Ser Arg Arg Gly Gly Gln
 20 25 30
 Asp Pro Ser Ser Ser Pro Val Leu Asn Lys Arg Lys Arg Gly Gly Trp
 35 40 45
 Cys Leu Asn Gly Pro Val Tyr Ser Ala Asp Ser Arg Thr Gly Arg Thr
 50 55 60
 Pro Ala Arg Pro Ile Tyr Leu Asp Trp Leu Cys Leu Lys Ala Ser Val
 65 70 75 80
 Asn Pro Val Gln Pro Val Ser Leu Arg Arg Ala Arg Ser Gly Ala Leu
 85 90 95
 Phe Gly Asn Ala Asp Ser
 100

<210> 1197
 <211> 386
 <212> DNA
 <213> Homo sapiens

<400> 1197
 acgcgtgatg atcatgaaaa tggtagacag cgcttagcag aagtcgcctc tgtgatgggc
 60
 tggcagcaag atgaaatcat cgtaaactga caaggggatg aaccctttct gcctgttgca
 120
 cttattcatg ccacggttaa agcgttagcc gatgatgctg aatctgaaat ggccacgatt
 180
 gccctgtcga ttgataacgt agcagagctg tttaacccaa atgtagttaa agtcgtttgt
 240
 gatgaaaaac agcgcgcctt gtatttcagt cgtgcgccta tgccatggga ccgtaattgt
 300
 tttatgaaaa aaacagacga tcaagcgta ccagcggatt ttcctgcgtt gcgtcatatt
 360
 ggtccgtatg tttaccgcac gacatn
 386

<210> 1198
 <211> 128
 <212> PRT
 <213> Homo sapiens

<400> 1198
 Thr Arg Asp Asp His Glu Asn Gly Thr Glu Arg Leu Ala Glu Val Ala

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1           5           10           15
Ser Val Met Gly Trp Gln Gln Asp Glu Ile Ile Val Asn Val Gln Gly
20           25           30
Asp Glu Pro Phe Leu Pro Val Ala Leu Ile His Ala Thr Val Lys Ala
35           40           45
Leu Ala Asp Asp Ala Glu Ser Glu Met Ala Thr Ile Ala Cys Ala Ile
50           55           60
Asp Asn Val Ala Glu Leu Phe Asn Pro Asn Val Val Lys Val Val Cys
65           70           75           80
Asp Glu Lys Gln Arg Ala Leu Tyr Phe Ser Arg Ala Pro Met Pro Trp
85           90           95
Asp Arg Asn Gly Phe Met Glu Lys Thr Asp Asp Gln Ala Leu Pro Ala
100          105          110
Asp Phe Pro Ala Leu Arg His Ile Gly Pro Tyr Val Tyr Arg Thr Thr
115          120          125

<210> 1199
<211> 318
<212> DNA
<213> Homo sapiens

<400> 1199
acgcggttcag cgatcatgtac agccccgggc cggtcaattt gatgggcctc aatgcggggc
60
ttacgggcaa attgcgtcgc tccagcgggt tctacatcgg cgtgggggtgc gcgatgctgc
120
tgatgggtcgg gctgggttggg ctcaccggcg aagcgatcat ctcccaggcg gcgctgccgt
180
atatattcttt gattggcggg gtgtacacgc tgtacctcgc ctaccagggtg ttcaccgcac
240
gtaccgaagt ggatgacgcc ccaagcgcgc ctgccaagac cttgaccttc tggaatggcc
300
tggtgatcca gttgctcc
318

<210> 1200
<211> 101
<212> PRT
<213> Homo sapiens

<400> 1200
Met Tyr Ser Pro Gly Pro Val Asn Leu Met Gly Leu Asn Ala Gly Leu
1           5           10           15
Thr Gly Lys Leu Arg Arg Ser Ser Gly Phe Tyr Ile Gly Val Gly Cys
20           25           30
Ala Met Leu Leu Met Val Gly Leu Val Gly Leu Thr Gly Glu Ala Ile
35           40           45
Ile Ser Gln Ala Ala Leu Pro Tyr Ile Ser Leu Ile Gly Gly Val Tyr
50           55           60
Thr Leu Tyr Leu Ala Tyr Gln Val Phe Thr Ala Arg Thr Glu Val Asp
65           70           75           80
Asp Ala Pro Ser Ala Pro Ala Lys Thr Leu Thr Phe Trp Asn Gly Leu
85           90           95
Val Ile Gln Leu Leu

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100

<210> 1201
 <211> 360
 <212> DNA
 <213> Homo sapiens

<400> 1201
 gtcgacgcac aactccagct ggctgctccc aacagcccga acatccccct ttatcgcgat
 60
 atgatactca ccgtgctgcg catggccaag gatgaccgca accgttggaa tgcaaaaatc
 120
 acgctgcagg cgatccgcga gctggataac gccttccgcg tgctggaaca gttcaagggc
 180
 cgccgcaagg tcacggtgtt tggctcggcg cgcacgccgg tcgaaagccc gctgtacgcc
 240
 ttggcaaggg aagtcggcac gctgctggcg caatccgacc tgatggtgat caccggcggg
 300
 ggcggcggca tcatggccgc tgcccacgag ggcgcaaggt ctggaacaca gcctgggggt
 360

<210> 1202
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 1202
 Val Asp Ala Gln Leu Gln Leu Val Ala Pro Asn Ser Pro Asn Ile Pro
 1 5 10 15
 Leu Tyr Arg Asp Met Ile Leu Thr Val Leu Arg Met Ala Lys Asp Asp
 20 25 30
 Arg Asn Arg Trp Asn Ala Lys Ile Thr Leu Gln Ala Ile Arg Glu Leu
 35 40 45
 Asp Asn Ala Phe Arg Val Leu Glu Gln Phe Lys Gly Arg Arg Lys Val
 50 55 60
 Thr Val Phe Gly Ser Ala Arg Thr Pro Val Glu Ser Pro Leu Tyr Ala
 65 70 75 80
 Leu Ala Arg Glu Val Gly Thr Leu Leu Ala Gln Ser Asp Leu Met Val
 85 90 95
 Ile Thr Gly Gly Gly Gly Ile Met Ala Ala Ala His Glu Gly Ala
 100 105 110
 Arg Ser Gly Thr Gln Pro Gly Gly
 115 120

<210> 1203
 <211> 477
 <212> DNA
 <213> Homo sapiens

<400> 1203
 ccggatatgg cagctcgact tcattcgacc agagttcttg gaacatttgg ctatcatgca
 60
 cctgagtatg caatgactgg acaacttagc tctaagagtg acgtttacag ttttggagtt
 120

ggtcttcttg agctcctgac tggagaaaag cctgtggatc ttccattacc aagaggacag
 180
 caaagtcttg tgacatgggc aactccacgg ctttgtgaag ataaagttag gcaatgcgtt
 240
 gattcaagac ttggagtaga atatcctcct aaatccgttg caaagtttgc agctgttgct
 300
 gcactgtgtg tgcaatatga agctgacttt cgaccaaca tgagcatcgt ggtgaaggcg
 360
 cttcaccccc tgctgaatgc acgtgcatcc aacaaccctg gatgaatgaa tgaatgactg
 420
 ccgtgtgttt tccttgacga gagtatctga atcagacaat catgtagcat tgaattc
 477

<210> 1204

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1204

Pro Asp Met Ala Ala Arg Leu His Ser Thr Arg Val Leu Gly Thr Phe
 1 5 10 15
 Gly Tyr His Ala Pro Glu Tyr Ala Met Thr Gly Gln Leu Ser Ser Lys
 20 25 30
 Ser Asp Val Tyr Ser Phe Gly Val Gly Leu Leu Glu Leu Leu Thr Gly
 35 40 45
 Arg Lys Pro Val Asp Leu Pro Leu Pro Arg Gly Gln Gln Ser Leu Val
 50 55 60
 Thr Trp Ala Thr Pro Arg Leu Cys Glu Asp Lys Val Arg Gln Cys Val
 65 70 75 80
 Asp Ser Arg Leu Gly Val Glu Tyr Pro Pro Lys Ser Val Ala Lys Phe
 85 90 95
 Ala Ala Val Ala Ala Leu Cys Val Gln Tyr Glu Ala Asp Phe Arg Pro
 100 105 110
 Asn Met Ser Ile Val Val Lys Ala Leu Gln Pro Leu Leu Asn Ala Arg
 115 120 125
 Ala Ser Asn Asn Pro Gly
 130

<210> 1205

<211> 407

<212> DNA

<213> Homo sapiens

<400> 1205

acgcgttgcc attgaagact ggcaattaca cgatttacac atcattgatg ctgcagttga
 60
 tgtgcacagg gaaacactag ctaccgtgca gcaggaaatg atgggagaaa tcagccatgg
 120
 taacaagaac caagccatcc tggacacaga cggccggggt tgtgcaaacg gaacgttagt
 180
 ctatcaatgt gttgcggaac gattcaaggg atgtgtggccc ccccatcac ttgcccaatc
 240
 aagatgtgga gggaatctgt ctgcgcagaa cctggatctc gtggttgtac gacgttgtcc
 300

ccttctcgct cggacgcccgc tcatgctccg ccacgtcgct gagcgagtga caaggtatcc
 360
 tgggaccatg cgtatgggtt caactgaagc gctggcgaaat cgtaaaan
 407

<210> 1206
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1206
 Met Met Gly Glu Ile Ser His Gly Asn Lys Asn Gln Ala Ile Leu Asp
 1 5 10 15
 Thr Asp Gly Arg Gly Cys Ala Asn Gly Thr Leu Val Tyr Gln Cys Val
 20 25 30
 Ala Glu Arg Phe Lys Gly Cys Trp Pro Pro Ser Leu Ala Gln Ser
 35 40 45
 Arg Cys Gly Gly Asn Leu Ser Ala Gln Asn Leu Asp Leu Val Val Val
 50 55 60
 Arg Arg Cys Pro Leu Leu Ala Arg Thr Pro Leu Met Leu Arg His Val
 65 70 75 80
 Ala Glu Arg Val Thr Arg Tyr Pro Gly Thr Met Arg Met Val Ser Thr
 85 90 95
 Glu Ala Leu Ala Asn Arg Lys
 100

<210> 1207
 <211> 292
 <212> DNA
 <213> Homo sapiens

<400> 1207
 gctagcatgt cacttttttc ttcagtagat ggcactggag agacattgca ggaatgaagag
 60
 gcttgcttc attcctatgt gctttcccg ccttgcttct ccagccatgt gtgggacaa
 120
 cagggtgtgct caccacotag tgagtttcag ggacactcca catgtcccag caagtcttat
 180
 cagcatctta gctggcttct caacaagact castggcacc cctgtggatg tctccatca
 240
 agtttcatta gtgccccagg gggagactcc cagaaagtgt cagcagcacc ac
 292

<210> 1208
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 1208
 Met Ser Leu Phe Ser Ser Val Asp Gly Thr Gly Glu Thr Leu Gln Asp
 1 5 10 15
 Glu Glu Ala Cys Leu His Ser Tyr Val Leu Ser Arg Pro Cys Phe Ser
 20 25 30
 Ser His Val Trp Asp Asn Gln Gly Cys Ser Pro Pro Ser Glu Phe Gln

```

      35              40              45
Gly His Ser Thr Cys Pro Ser Lys Ser Tyr Gln His Leu Ser Trp Leu
      50              55              60
Leu Asn Lys Thr Gln Trp His Pro Cys Gly Cys Leu Pro Ser Ser Phe
      65              70              75              80
Ile Ser Ala Pro Gly Gly Asp Ser Gln Lys Val Ser Ala Ala Pro
      85              90              95

```

<210> 1209
 <211> 431
 <212> DNA
 <213> Homo sapiens

```

<400> 1209
ttggttcccta taatggcggg agcttacatt tttgtcggtta tcattatttt gttaatgcatt
60
gccagtggaag ttattccggc aatatcaact attgtcgcagt atgcctttac gccagctttc
120
gcgcagggtg gttttgtcgg tgcaacggta tggatggcga ttcgtttttg tgtgcccyt
180
gggtgtatttt caaatgagge aggttttaggt tcggcgccga tcgctcatgc cagtgcacaa
240
actaatgaac cggttcgccca agggttgggtg gcgatgttag gtactttcct tgatacactt
300
attatttgta caggtttagt gattgttatt tctgggtcctt ggacagaagg attgtcgggt
360
gctgcgttaa catctgctgc atttaactctg gcgttacctg gttggggggg atacttagtc
420
gctatcagct g
431

```

<210> 1210
 <211> 143
 <212> PRT
 <213> Homo sapiens

```

<400> 1210
Leu Val Pro Ile Met Ala Val Ala Tyr Ile Phe Ala Gly Ile Ile Ile
1      5      10      15
Leu Leu Met His Ala Ser Glu Val Ile Pro Ala Ile Ser Thr Ile Val
20      25      30
Glu Tyr Ala Phe Thr Pro Ala Ser Ala Gln Gly Gly Phe Ala Gly Ala
35      40      45
Thr Val Trp Met Ala Ile Arg Phe Gly Val Ala Arg Gly Val Phe Ser
50      55      60
Asn Glu Ala Gly Leu Gly Ser Ala Pro Ile Ala His Ala Ser Ala Gln
65      70      75      80
Thr Asn Glu Pro Val Arg Gln Gly Leu Val Ala Met Leu Gly Thr Phe
85      90      95
Leu Asp Thr Leu Ile Ile Cys Thr Gly Leu Val Ile Val Ile Ser Gly
100      105      110
Ala Trp Thr Glu Gly Leu Ser Gly Ala Ala Leu Thr Ser Ala Ala Phe
115      120      125
Asn Leu Ala Leu Pro Gly Trp Gly Gly Tyr Leu Val Ala Ile Ser

```

```

130                               135                               140

<210> 1211
<211> 480
<212> DNA
<213> Homo sapiens

<400> 1211
gaggaggac gagaggctgg tgagatggag tccagcacc tgcaggagag cccaggggcc
60
agagccgaag ctgtgcttct ccatgagatg gatgaagatg atctggccaa tgccttgatc
120
tggcctgaga ttcaacagga gctgaaaatc attgaatctg aggaggagct ctcctcgttg
180
ccacctcctg ctctgaagac cagcccaatt cagcctattc tcgagtcgag tctggggccc
240
tttattccct cagagcctcc tgggagcttg ccttgtggct ccttccctgc tccagtctcc
300
acccctctgg aggtgtggac tagggatcca gccaatcaga gcacacaggg ggctccaca
360
gcagccagca gagagaagcc ggaacctgag cagggcctgc acccagacct gcggcgcctg
420
gctcctctgg aaatagtctc ttttgagaag gcctctccag aggcctggagt gtgctcgcga
480

<210> 1212
<211> 160
<212> PRT
<213> Homo sapiens

<400> 1212
Glu Glu Gly Arg Glu Ala Gly Glu Met Glu Ser Ser Thr Leu Gln Glu
1 5 10 15
Ser Pro Arg Ala Arg Ala Glu Ala Val Leu Leu His Glu Met Asp Glu
20 25 30
Asp Asp Leu Ala Asn Ala Leu Ile Trp Pro Glu Ile Gln Gln Glu Leu
35 40 45
Lys Ile Ile Glu Ser Glu Glu Glu Leu Ser Ser Leu Pro Pro Pro Ala
50 55 60
Leu Lys Thr Ser Pro Ile Gln Pro Ile Leu Glu Ser Ser Leu Gly Pro
65 70 75 80
Phe Ile Pro Ser Glu Pro Pro Gly Ser Leu Pro Cys Gly Ser Phe Pro
85 90 95
Ala Pro Val Ser Thr Pro Leu Glu Val Trp Thr Arg Asp Pro Ala Asn
100 105 110
Gln Ser Thr Gln Gly Ala Ser Thr Ala Ala Ser Arg Glu Lys Pro Glu
115 120 125
Pro Glu Gln Gly Leu His Pro Asp Leu Ala Ser Leu Ala Pro Leu Glu
130 135 140
Ile Val Pro Phe Glu Lys Ala Ser Pro Glu Ala Gly Val Cys Ser Arg
145 150 155 160

<210> 1213
<211> 1141

```

<212> DNA

<213> Homo sapiens

<400> 1213

nntcatgatg gcggcctggt gtgtgggtat gtccacgatg ggcgcgtcac gcgtgtcgcc
 60
 cgtgatgctc agggcggggt taccgggata gaggggccat cagggcggtg gagttacggc
 120
 tacaacgagg ctgggtcact catcagcgcg acgggggcccc gcacacaaca taactggact
 180
 cagcagcctt atggccggct caccagccac gccacatccg gaaccgacac caccttcgcc
 240
 tgggaccagg aaggccacct ggcgagacg tgtagcggtg cacacgggca tgccactggc
 300
 acccagtatc gctatgacgc agcgggacgg cgcgtcagtg cgaccagctc agacggccag
 360
 gaggagcggt actcctggga tggacggggg ttggtgtctg acatcaccac cgacggccag
 420
 accgtatcga ctacgtcga tgcattgggg cgcgccagtc gtatcaccac taaggggcag
 480
 caggtacgag tggactggga cctcgtgacc ggagccccca cctcgattga tggctgcctt
 540
 gtgcttcccc tgcccgagg acgcatactc ggccccaac ccatcgggca taaccaacta
 600
 tggcgtaggg tcatgccacc cgaccctgac aaccttacc agcccgccac ggccactatt
 660
 gaggggtgct ccgagacgat caggatggcc gggaacacgc tagtggttga tggtcaccct
 720
 tgggtggggg gcgcctctac gacccaacta ccaccacctt cttgtctcct gacccggtaa
 780
 ccccgcccg cggcgcgcta tggggccaaca acccctacga ctacggccaac aacaaccccc
 840
 tcaccctcac cgatcctctc gggaccacac ccgtcacgga cgaccaactg gcaactcctc
 900
 cccaccccat cggcacactc gcacactacg tcgccaactc cgtcagcaca ctcgtgcac
 960
 acatcacgga tccgatcagc cactggtggg ccaaccacaa agaccggatc ctctcccggg
 1020
 acttcctgat cgggtccggc ctctgcatcg cgggttatcg gtacgggcca cgggctgtagg
 1080
 aggacccttc ctaccggcgg ccatttcagg gggactcacc tcaggcggtc ttctccgtag
 1140
 c
 1141

<210> 1214

<211> 259

<212> PRT

<213> Homo sapiens

<400> 1214

Xaa His Asp Gly Gly Leu Val Cys Gly Tyr Val His Asp Gly Arg Val
 1 5 10 15
 Thr Arg Val Ala Arg Asp Ala Gln Gly Arg Val Thr Gly Ile Glu Gly

20 25 30
 Pro Ser Gly Arg Trp Ser Tyr Gly Tyr Asn Glu Ala Gly Ser Leu Ile
 35 40 45
 Ser Ala Thr Gly Pro Arg Thr Gln His Asn Trp Thr His Asp Ala Tyr
 50 55 60
 Gly Arg Leu Thr Ser His Ala Thr Ser Gly Thr Asp Thr Thr Phe Ala
 65 70 75 80
 Trp Asp Gln Glu Gly His Leu Ala Gln Thr Cys Thr Arg Ala His Gly
 85 90 95
 His Ala Thr Ala Thr Gln Tyr Arg Tyr Asp Ala Ala Gly Arg Val
 100 105 110
 Ser Ala Thr Ser Ser Asp Gly Gln Glu Glu Arg Tyr Ser Trp Asp Gly
 115 120 125
 Arg Gly Trp Leu Ser Asp Ile Thr Thr Asp Ala Thr Thr Val Ser Thr
 130 135 140
 His Val Asp Ala Leu Gly Arg Ala Ser Arg Ile Thr Thr Lys Gly Gln
 145 150 155 160
 Gln Val Arg Val Asp Trp Asp Leu Val Thr Gly Ala Pro Thr Ser Ile
 165 170 175
 Asp Gly Arg Pro Val Leu Pro Leu Pro Gly Gly Arg Ile Leu Gly Ala
 180 185 190
 Thr Pro Ile Gly Asp Thr Asn Leu Trp Arg Glu Val Met Pro Thr Asp
 195 200 205
 Pro Asp Asn Pro Tyr Gln Pro Ala Thr Ala Thr Ile Glu Gly Val Pro
 210 215 220
 Glu Thr Ile Arg Met Ala Gly Asn Thr Leu Val Val Asp Gly His Pro
 225 230 235 240
 Trp Trp Gly Arg Ala Ser Thr Thr Gln Leu Pro Pro Ser Cys Leu
 245 250 255
 Leu Thr Arg

<210> 1215
 <211> 317
 <212> DNA
 <213> Homo sapiens

<400> 1215
 acgcgttcgc tgcagatcga gtccgccgtg agctcgatct acctgtggat gtactacgtg
 60
 ggccgtgccga catccggcat cgggggggat cccaacctgc ttacctttta ttggaaccgc
 120
 ccccggggtc aaccgcgcc taccgggag aaccgcgtc ctcggagggg gtgtctctgc
 180
 agtcgccgc gtgggtgcgt ggaagaagta ccgcggcacg accttcggcg ggctgtctcc
 240
 gtcgtgtcc ctcggcctcg tgctcgcgtt catcgtgctg aacaaggctg gctcggccga
 300
 gtacatcgcc tggatcn
 317

<210> 1216
 <211> 102
 <212> PRT

<213> Homo sapiens

<400> 1216

```

Met Tyr Cys Gly Glu Pro Thr Leu Phe Ser Thr Met Asn Ala Ser Thr
 1             5             10             15
Arg Pro Arg Asp Ser Asp Gly Ser Ser Pro Pro Lys Val Val Pro Arg
      20             25             30
Tyr Phe Phe His Ala Pro Thr Pro Ala Thr Ala Arg Thr Pro Pro Pro
 35             40             45
Arg Ser Gly Val Leu Pro Val Met Ala Gly Leu Thr Pro Gly Ala Val
 50             55             60
Pro Ile Lys Gly Lys Gln Val Gly Ile Pro Pro Asp Ala Gly Cys Arg
 65             70             75             80
His Ala His Val Val His Pro Gln Val Asp Arg Ala His Arg Arg Leu
      85             90             95
Asp Leu Gln Arg Thr Arg
      100

```

<210> 1217

<211> 548

<212> DNA

<213> Homo sapiens

<400> 1217

```

nacgcgtggg ttgacgcgct attaaacgat aagagcaaaa aaacatttcc tcatttatta
60
cgttgctggg tgaatgatgt ttctgggtgat agtcagtggg tagagatgcg aggcagtgtg
120
acagggtggg acagccgtca tcgagctcag atgggtgagag ggacattcga gcgtattaac
180
catctttatt acgctgaaaa tgaattaatt gcggcccggtg aagatgctca gcgacgagag
240
cttattttat cggcctttgct aaataatatt ccagaccctg ttgggtctaa agatgaaagc
300
ggtcgttatt tggactgtaa ccatgcgttt tgtctgttta atggtttaga gcagagtgtat
360
gttcagggggc aaaaagacag tgaattaaac ttagataata atgggtcaata ttatcaagat
420
atgggcccgtg aggtattatgc gcgagggggag atttttcatg aacattgttg gggtagccct
480
gcagatggaa gtgacaaccg cttgtttgaa gtatatcgag tccctatcaa agagccctacc
540
gtgaattc
548

```

<210> 1218

<211> 182

<212> PRT

<213> Homo sapiens

<400> 1218

```

Xaa Ala Trp Val Asp Ala Leu Leu Asn Asp Lys Ser Lys Lys Thr Phe
 1             5             10             15
Pro His Leu Leu Arg Cys Arg Val Asn Asp Val Ser Gly Asp Ser Gln

```

```

                20                25                30
Trp Ile Glu Met Arg Gly Ser Val Thr Gly Trp Asp Ser Arg His Arg
      35                40                45
Ala Gln Met Val Arg Gly Thr Phe Glu Arg Ile Asn His Leu Ile Asp
      50                55                60
Ala Glu Asn Glu Leu Ile Ala Ala Arg Glu Asp Ala Gln Arg Arg Glu
      65                70                75                80
Leu Ile Leu Ser Ala Leu Leu Asn Asn Ile Pro Asp Pro Val Trp Ser
      85                90                95
Lys Asp Glu Ser Gly Arg Tyr Leu Asp Cys Asn His Ala Phe Cys Leu
      100                105                110
Phe Asn Gly Leu Glu Gln Ser Asp Val Gln Gly Gln Lys Asp Ser Glu
      115                120                125
Leu Asn Leu Asp Asn Asn Gly Gln Tyr Tyr Gln Asp Met Gly Gly Glu
      130                135                140
Val Leu Ala Arg Gly Glu Ile Phe His Glu His Cys Trp Gly Thr Pro
      145                150                155                160
Ala Asp Gly Ser Asp Asn Arg Leu Phe Glu Val Tyr Arg Val Pro Ile
      165                170                175
Lys Glu Pro Thr Val Asn
      180

```

<210> 1219

<211> 308

<212> DNA

<213> Homo sapiens

<400> 1219

```

acgcgtgaag ggaggaatac agatggagaa atgggtccac caaaaaatga tgaggggtacc
60
tccagagaaa attaccaaga ccattctgtt agtattttcc agctccacag gcctttggaa
120
gttcccagac caccctccct cttttcaaac taaaacaggg atggctctta accaccaccc
180
aaaggccaag ggggtcttaa aacccaaacc aagtggggca ggggccagcc tcttcaggag
240
ggcccaaccc tgcagcctct gccattttgg gaaagaccgt gagtgggaat tatgggtcgg
300
tggggggg
308

```

<210> 1220

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1220

```

Met Glu Lys Trp Val His Gln Lys Met Met Arg Val Pro Glu Lys
1      5      10      15
Ile Thr Lys Thr Ile Leu Leu Val Phe Ser Ser Ser Thr Gly Leu Trp
      20      25      30
Lys Phe Pro Asp His Pro Pro Ser Phe Gln Thr Lys Thr Gly Met Ala
      35      40      45
Leu Asn His His Pro Lys Ala Arg Gly Val Leu Lys Pro Lys Pro Ser

```

```

      50              55              60
Gly Ala Gly Ala Ser Leu Phe Arg Arg Ala Gln Pro Cys Ser Leu Cys
65              70              75              80
Pro Phe Gly Lys Asp Arg Glu Leu Glu Leu Trp Val Gly Gly Gly
      85              90              95

```

<210> 1221
 <211> 569
 <212> DNA
 <213> Homo sapiens

```

<400> 1221
gcgcgccagg ggcaggtagc ctgtggcagg tgaggctcgc tgtggggtgt gtcgccagag
60
gccccgtccag gaaagctgca cctcagagaa cgagtttctt tccttacctg ggaagtttct
120
tctgtaacac gttaagcccc acaggttaagg cctgatcccc cctggacggc tcccctctcc
180
agtgttccca gtctggaggt antcttttct aagccatctc ctcagaatgt gatgggtacc
240
aggatgcaca cccgggtggcc ctgtggtgtg aggcctcagc aaacacggtc agaagatgaa
300
cacacagaga cccgcccgtc ggaaggagag gagggagcgg atacggaggc ccacgtgccca
360
gaagggtccc ttgcagtggg ttggttatgt gcctgcaatc ccagagtgtc ctggaaggac
420
ctcagatcta acgagctcag ccggcagctg cactggggac cagccctctg agcttcactt
480
gttttctctt gtcccatcag aaaccaatac gaagataaaa tgggaaaaaa aaaaatccca
540
ttcacggcac agcctgccga gaaacgcgt
569

```

<210> 1222
 <211> 91
 <212> PRT
 <213> Homo sapiens

```

<400> 1222
Met Asn Thr Gln Arg Pro Ala Arg Arg Lys Glu Arg Arg Glu Arg Ile
1              5              10              15
Arg Arg Pro Thr Cys Gln Lys Gly Pro Leu Gln Trp Cys Gly Tyr Val
20              25              30
Pro Ala Ile Pro Glu Cys Pro Arg Arg Thr Ser Asp Leu Thr Ser Ser
35              40              45
Ala Gly Ser Cys Thr Trp Asp Gln Pro Ser Glu Leu His Leu Phe Ser
50              55              60
Ser Val Pro Ser Glu Thr Asn Thr Lys Ile Lys Trp Glu Lys Lys Lys
65              70              75              80
Ser His Ser Arg His Ser Leu Pro Arg Asn Ala
      85              90

```

<210> 1223
 <211> 450

<212> DNA

<213> Homo sapiens

<400> 1223

aagcttgctc aggctagctc cgacgctgct gctctcaaac tcgtcgatgc ccaccgggtg
 60
 ttgtgcgctc accgagaggg gccatacggg gtagacgagt ggtctcagcg catggttact
 120
 gtactttcag atgtgttgcc tgggtgttggc caaggccggg gggttctcgg cgaactgca
 180
 atagtaacgc ataacctcgc acaattggga gtcaataacg gtgattcggg ggtaactggt
 240
 gaaacaaggc cgtcccccac gatagctcta ccgggacccg gtggagtcgc cagacgggtg
 300
 ccctgttccc tcattccatc gctgcaaccc ttacaggcga tgacgattca caaagcgacg
 360
 ggcagccaat tcacggagct aacggtgggc ctgccaccac ccgactcgcc cctcctctct
 420
 cgtgagttgc tctataccgc catcacgctg
 450

<210> 1224

<211> 150

<212> PRT

<213> Homo sapiens

<400> 1224

Lys Leu Ala Gln Ala Ser Ala Asp Ala Ala Leu Lys Leu Val Asp
 1 5 10 15
 Ala His Arg Leu Leu Cys Ala His Arg Glu Gly Pro Tyr Gly Val Asp
 20 25 30
 Glu Trp Ser Gln Arg Met Val Thr Val Leu Ser Asp Val Leu Pro Gly
 35 40 45
 Val Gly Gln Gly Arg Trp Val Leu Gly Glu Thr Ala Ile Val Thr His
 50 55 60
 Asn Leu Ala Gln Leu Gly Val Asn Asn Gly Asp Cys Gly Val Ile Val
 65 70 75 80
 Glu Thr Arg Pro Val Pro Thr Ile Ala Leu Pro Gly Pro Gly Gly Val
 85 90 95
 Pro Arg Arg Leu Pro Cys Ser Leu Ile Pro Ser Leu Gln Pro Leu Gln
 100 105 110
 Ala Met Thr Ile His Lys Ala Gln Gly Ser Gln Phe Thr Asp Val Thr
 115 120 125
 Val Val Leu Pro Pro Pro Asp Ser Pro Leu Leu Ser Arg Glu Leu Leu
 130 135 140
 Tyr Thr Ala Ile Thr Arg
 145 150

<210> 1225

<211> 436

<212> DNA

<213> Homo sapiens

<400> 1225

ncccccccc caccgggat ggtgaacct gggatggcca ctgggagct caaagtgtg
 60
 tcagtgggag gacaaggtec tcaattectg gcacattggc ccagagaagt catgaaaaac
 120
 caaagccccc cgaaagtaag aagtagaaaa aaaccggacc cggaccagat gaagggaccc
 180
 gggaagtgtt tggaaaagag actgctgaag tgtctccttg caggcatcac cgtgagctgg
 240
 ggctttgcac acagcatctt catggcttcc cacaatgac ccagaactga tccagagaaa
 300
 cccagggatc aggggttgac ccgacctgt catcatccca ttctacaaat gaggacactg
 360
 aggcctgtgt aaaaggagg ggtggatgga accaggtggc ctggetctaa gaccagagg
 420
 ctggagtgtg ctcattg
 436

<210> 1226

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1226

Met	Val	Asn	Thr	Gly	Met	Ala	Thr	Trp	Glu	Leu	Lys	Val	Leu	Ser	Val
1				5					10					15	
Gly	Gly	Gln	Gly	Pro	Gln	Phe	Leu	Ala	His	Trp	Pro	Arg	Glu	Val	Met
			20						25				30		
Lys	Thr	Gln	Ser	Pro	Pro	Lys	Val	Arg	Ser	Arg	Lys	Lys	Pro	Asp	Pro
			35				40					45			
Asp	Gln	Met	Lys	Gly	Pro	Gly	Lys	Phe	Leu	Glu	Lys	Arg	Leu	Leu	Lys
		50				55					60				
Cys	Leu	Leu	Ala	Gly	Ile	Thr	Val	Ser	Trp	Gly	Phe	Ala	His	Ser	Ile
				70					75					80	
Phe	Met	Ala	Phe	His	Asn	Asp	Pro	Arg	Thr	Asp	Pro	Glu	Lys	Pro	Arg
				85					90					95	
Asp	Gln	Gly	Leu	Thr	Arg	Pro	Cys	His	His	Pro	Ile	Leu	Gln	Met	Arg
			100					105					110		
Thr	Leu	Arg	Pro	Gly	Glu	Lys	Gly	Gly	Val	Asp	Gly	Thr	Arg	Trp	Pro
			115				120					125			
Gly	Ser	Lys	Thr	Gln	Arg	Leu	Glu	Cys	Ala	His					
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<210> 1227

<211> 756

<212> DNA

<213> Homo sapiens

<400> 1227

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 120
 gacaaagcac gtacacgtaa gatggcggt acaggactag gtctagctat ttccaaagag
 180

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 240
 atcttcatta ccctaccatg tgaattattt gaagatgggtg attgggatga atagtaaaaga
 300
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 420
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 660
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 756

<210> 1228

<211> 97

<212> PRT

<213> Homo sapiens

<400> 1228

Val	Glu	Phe	His	Val	Lys	Gln	Asn	Ala	Leu	Tyr	Asn	Arg	Met	Thr	Ile
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Arg	Ile	Lys	Asp	Asn	Gly	Ile	Gly	Ile	Pro	Ile	Asn	Lys	Val	Asp	Lys
			20						25				30		
Ile	Phe	Asp	Arg	Phe	Tyr	Arg	Val	Asp	Lys	Ala	Arg	Thr	Arg	Lys	Met
		35					40					45			
Gly	Gly	Thr	Gly	Leu	Gly	Leu	Ala	Ile	Ser	Lys	Glu	Ile	Val	Glu	Ala
		50				55				60					
His	Asn	Gly	Arg	Ile	Trp	Ala	Asn	Ser	Val	Glu	Gly	Gln	Gly	Thr	Ser
65					70					75				80	
Ile	Phe	Ile	Thr	Leu	Pro	Cys	Glu	Ile	Ile	Glu	Asp	Gly	Asp	Trp	Asp
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Glu

<210> 1229

<211> 377

<212> DNA

<213> Homo sapiens

<400> 1229

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 120
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 180

gctcaggtaa ccaatccgcc cttggagcgt atccgcgagg agcttggtcac ctccctgaag
 240
 ggcaccatcg gcccgagggc gaacttgctt gagcctggcc cggaatcatg tcggcaagt
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 377

<210> 1230
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 1230
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 20 25 30
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 35 40 45
 Trp Asp Tyr Phe Ser Gln Leu Phe Ala Gln Val Thr Asn Pro Pro Leu
 50 55 60
 Asp Ala Ile Arg Glu Glu Leu Val Thr Ser Leu Thr Gly Thr Ile Gly
 65 70 75 80
 Pro Glu Ala Asn Leu Leu Glu Pro Gly Pro Glu Ser Cys Arg Gln Val
 85 90 95
 Val Val Asn Tyr Pro Ile Ile Asp Ser Asp Gln Leu Ala Lys Ile Ile
 100 105 110
 His Ile Asp Ala Asp Gly Glu His Pro
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<210> 1231
 <211> 351
 <212> DNA
 <213> Homo sapiens

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 120
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 180
 aactcttcog atgagtctct gcgtcgctt gagaaactcg cgggtagaag tgctcagttc
 240
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 300
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 351

<210> 1232
 <211> 91
 <212> PRT

<213> Homo sapiens

<400> 1232

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Val Leu Ala Leu Leu Glu His Gly Glu Asp Val Val Val Leu Asp Asn
      20             25             30
Leu Ser Asn Ser Ser Asp Glu Ser Leu Arg Arg Val Glu Lys Leu Ala
      35             40             45
Gly Arg Ser Ala Gln Phe Tyr Gln Gly Asp Ile Leu Asp Ala Glu Cys
      50             55             60
Leu His Arg Ile Phe Glu Ala His Asp Ile Ser Ala Val Ile His Phe
      65             70             75             80
Ala Gly Leu Lys Gly Val Gly Glu Ser Thr Arg
      85             90

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<210> 1233

<211> 4982

<212> DNA

<213> Homo sapiens

<400> 1233

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120
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180
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240
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300
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720
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780
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960

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4200

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<210> 1234

<211> 708

<212> PRT

<213> Homo sapiens

<400> 1234

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20 25 30
Ser Gly Thr Ile Ile Thr Glu Asp Pro Phe Lys Ser Gly Ser Ser Asp
35 40 45
Val Gly Arg Asp Trp Asp Pro Ser Thr Glu Gly Gly Ser Ser Pro
50 55 60
Leu Ile Cys Pro Asp Ser Ser Ala Arg Pro Arg Val Lys Ser Ser Tyr
65 70 75 80
Ser Met Glu Asn Ala Asn Lys Trp Ser Cys His Met Cys Thr Tyr Leu
85 90 95
Asn Trp Pro Arg Ala Ile Arg Cys Thr Gln Cys Leu Ser Gln Arg Arg
100 105 110
Thr Arg Ser Pro Thr Glu Ser Pro Gln Ser Ser Gly Ser Gly Ser Arg
115 120 125
Pro Val Ala Phe Ser Val Asp Pro Cys Glu Glu Tyr Asn Asp Arg Asn
130 135 140
Lys Leu Asn Thr Arg Thr Gln His Trp Thr Cys Ser Val Cys Thr Tyr

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Glu	Asn	Trp	Ala	Lys	Ala	Lys	Arg	Cys	Val	Val	Cys	Asp	His	Pro	Arg
			165						170					175	
Pro	Asn	Asn	Ile	Glu	Ala	Ile	Glu	Leu	Ala	Glu	Thr	Glu	Glu	Ala	Ser
			180					185						190	
Ser	Ile	Ile	Asn	Glu	Gln	Asp	Arg	Ala	Arg	Trp	Arg	Gly	Ser	Cys	Ser
			195					200					205		
Ser	Gly	Asn	Ser	Gln	Arg	Arg	Ser	Pro	Pro	Ala	Thr	Lys	Arg	Asp	Ser
			210					215				220			
Glu	Val	Lys	Met	Asp	Phe	Gln	Arg	Ile	Glu	Leu	Ala	Gly	Ala	Val	Gly
			225					230				235			240
Ser	Lys	Glu	Glu	Leu	Glu	Val	Asp	Phe	Lys	Lys	Leu	Lys	Gln	Ile	Lys
			245						250					255	
Asn	Arg	Met	Lys	Lys	Thr	Asp	Trp	Leu	Phe	Leu	Asn	Ala	Cys	Val	Gly
			260						265					270	
Val	Val	Glu	Gly	Asp	Leu	Ala	Ala	Ile	Glu	Ala	Tyr	Lys	Ser	Ser	Gly
			275					280					285		
Gly	Asp	Ile	Ala	Arg	Gln	Leu	Thr	Ala	Asp	Glu	Val	Arg	Leu	Leu	Asn
			290					295				300			
Arg	Pro	Ser	Ala	Phe	Asp	Val	Gly	Tyr	Thr	Leu	Val	His	Leu	Ala	Ile
			305					310				315			320
Arg	Phe	Gln	Arg	Gln	Asp	Met	Leu	Ala	Ile	Leu	Leu	Thr	Glu	Val	Ser
			325						330					335	
Gln	Gln	Ala	Ala	Lys	Cys	Ile	Pro	Ala	Met	Val	Cys	Pro	Glu	Leu	Thr
			340						345					350	
Glu	Gln	Ile	Arg	Arg	Glu	Ile	Ala	Ala	Ser	Leu	His	Gln	Arg	Lys	Gly
			355						360				365		
Asp	Phe	Ala	Cys	Tyr	Phe	Leu	Thr	Asp	Leu	Val	Thr	Phe	Thr	Leu	Pro
			370					375				380			
Ala	Asp	Ile	Glu	Asp	Leu	Pro	Pro	Thr	Val	Gln	Glu	Lys	Leu	Phe	Asp
			385					390				395			400
Glu	Val	Leu	Asp	Arg	Asp	Val	Gln	Lys	Glu	Leu	Glu	Glu	Glu	Ser	Pro
			405						410					415	
Ile	Ile	Asn	Trp	Ser	Leu	Glu	Leu	Ala	Thr	Arg	Leu	Asp	Ser	Arg	Leu
			420						425					430	
Tyr	Ala	Leu	Trp	Asn	Arg	Thr	Ala	Gly	Asp	Cys	Leu	Leu	Asp	Ser	Val
			435						440					445	
Leu	Gln	Ala	Thr	Trp	Gly	Ile	Tyr	Asp	Lys	Asp	Ser	Val	Leu	Arg	Lys
			450						455				460		
Ala	Leu	His	Asp	Ser	Leu	His	Asp	Cys	Ser	His	Trp	Phe	Tyr	Thr	Arg
			465						470				475		480
Trp	Lys	Asp	Trp	Glu	Ser	Trp	Tyr	Ser	Gln	Ser	Phe	Gly	Leu	His	Phe
			485						490					495	
Ser	Leu	Arg	Glu	Glu	Gln	Trp	Gln	Glu	Asp	Trp	Ala	Phe	Ile	Leu	Ser
			500						505					510	
Leu	Ala	Ser	Gln	Pro	Gly	Ala	Ser	Leu	Glu	Gln	Thr	His	Ile	Phe	Val
			515						520					525	
Leu	Ala	His	Ile	Leu	Arg	Arg	Pro	Ile	Ile	Val	Tyr	Gly	Val	Lys	Tyr
			530						535					540	
Tyr	Lys	Ser	Phe	Arg	Gly	Glu	Thr	Leu	Gly	Tyr	Thr	Arg	Phe	Gln	Gly
			545						550					555	560
Val	Tyr	Leu	Pro	Leu	Leu	Trp	Glu	Gln	Ser	Phe	Cys	Trp	Lys	Ser	Pro
			565						570					575	
Ile	Ala	Leu	Gly	Tyr	Thr	Arg	Gly	His	Phe	Ser	Ala	Leu	Val	Ala	Met

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Asp Asp Asp Val Thr Ile Thr Phe Leu Pro Leu Val Asp Ser Glu Arg
          610          615          620
Lys Leu Leu His Val His Phe Leu Ser Ala Gln Glu Leu Gly Asn Glu
          625          630          635          640
Glu Gln Gln Glu Lys Leu Leu Arg Glu Trp Leu Asp Cys Cys Val Thr
          645          650          655
Glu Gly Gly Val Leu Val Ala Met Gln Lys Ser Ser Arg Arg Arg Asn
          660          665          670
His Pro Leu Val Thr Gln Met Val Glu Lys Trp Leu Asp Arg Tyr Arg
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<210> 1235
<211> 383
<212> DNA
<213> Homo sapiens

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<400> 1235
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383

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<210> 1236
<211> 127
<212> PRT
<213> Homo sapiens

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Ile Gly Ile Leu Trp Gly Arg Tyr Asp Leu Leu Ala Glu Leu Pro Pro
35     40     45
Phe Leu Gly Gly Gly Glu Met Ile Glu Val Val Arg Met Glu Gly Ser
50     55     60
Thr Tyr Ala Glu Pro Pro His Arg Phe Glu Ala Gly Thr Pro Pro Ile

```

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65              70              75              80
Ala Gln Leu Ala Ala Leu Gly Val Ala Ala Asp Tyr Leu Asp Gly Ile
              85              90              95
Gly Met Gln Ala Ile Ala Glu His Glu His Glu Leu Ala Ala Arg Met
              100              105              110
Leu Glu Asp Tyr Gln Thr Val Lys Gly Val Gln Pro Glu Arg Gly
              115              120              125

<210> 1237
<211> 1608
<212> DNA
<213> Homo sapiens

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720
actgttagcc gctgaagtat tcagtgaaac atctactctg ggaccaaaaga ccttccatag
780
atgcagatcc tgetttcaac ttctaacttt tgatatgggt tatggcagtt tcatgtaccc
840
tgtagtgtcc cagggtacac agcattttaa ttttcaagat tatgataata tggattttga
900
ggaccaaaaa acagaagaat tcctttttaa tgacactttc aattttctct tccctaatga
960
atcatcactt tccatatttt ctgagatatt tcagagactt tatagatcag atgttttcaa
1020
gggtgaaaaa tatcaaaagg aactaaatca gtgtctgttc ttagaagaaa ttaactcaat
1080
tatgactttc ataaaggaac ttggaagtct gggacaattc caactgctct tcccactcac
1140
tactcctggg attcagtcac tgatgcatga attttatgat gtggcaaatc ctgtgggaaa
1200

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tcttggtcga gtctgaccc aatactgggc tcttttaaat gtatttgaac aatttcagtt
 1260
 catgaataaa aagacacagc cacatccact ggaatggaat tctttcacag aagataagaa
 1320
 cattgaaaaa ccacaagtgc catttgatgc aatagaaaaa aaaaaagctg cagttccaca
 1380
 aattaaaaaa gaaaataaag aaatacattg cagtgatgat gaaaacacac catgtcatat
 1440
 caagcagatc ttcacacatc cacatttgga actaaatcct gactttcatc caaagatcaa
 1500
 agattattac tgtgaagtcc catttgatgt ggtaacagtg acaattggag tggaaactcc
 1560
 taagtgtctg tgcaaggtgc acctgtacga gcaggcaggg ccaagctt
 1608

<210> 1238

<211> 458

<212> PRT

<213> Homo sapiens

<400> 1238

Met Cys Gln Leu Gly Leu His Gln Lys Ala Asn Arg Leu Pro Glu Ile
 1 5 10 15
 Gln Gln Pro Leu Cys Arg Lys Glu Gly Leu Cys Gln Ile Val Arg Arg
 20 25 30
 Phe Pro Glu Leu Gln Leu Pro Val Ser Pro Ser Val Cys Leu Asp Gln
 35 40 45
 Gly Met Gln Leu Lys Pro Ser Thr Ser Ser His Leu Leu Lys Thr Val
 50 55 60
 Lys Pro Arg Val Trp Lys Pro Gly Asp Trp Ser Arg Glu Gln Leu Asn
 65 70 75 80
 Glu Thr Thr Val Leu Ala Pro His Glu Thr Ile Phe Arg Ala Lys Asp
 85 90 95
 Leu Ser Val Ile Leu Lys Ala Tyr Val Leu Val Thr Ser Leu Thr Pro
 100 105 110
 Leu Arg Ala Phe Ile His Ser Thr Gly Thr Val Trp Asn Pro Pro Lys
 115 120 125
 Lys Lys Arg Phe Thr Val Lys Leu Gln Thr Phe Phe Glu Thr Phe Leu
 130 135 140
 Arg Ala Ser Ser Pro Gln Gln Ala Phe Asp Ile Met Lys Glu Ala Ile
 145 150 155 160
 Gly Lys Leu Leu Leu Ala Ala Glu Val Phe Ser Glu Thr Ser Thr Leu
 165 170 175
 Gly Pro Lys Thr Phe His Arg Cys Arg Phe Cys Phe Gln Leu Leu Thr
 180 185 190
 Phe Asp Ile Gly Tyr Gly Ser Phe Met Tyr Pro Val Val Leu Gln Val
 195 200 205
 His Glu His Leu Asn Phe Gln Asp Tyr Asp Asn Met Asp Phe Glu Asp
 210 215 220
 Gln Asn Thr Glu Glu Phe Leu Leu Asn Asp Thr Phe Asn Phe Leu Phe
 225 230 235 240
 Pro Asn Glu Ser Ser Leu Ser Ile Phe Ser Glu Ile Phe Gln Arg Leu
 245 250 255
 Tyr Arg Ser Asp Val Phe Lys Gly Glu Asn Tyr Gln Lys Glu Leu Asn

```

                260                265                270
Gln Cys Leu Ser Leu Glu Glu Ile Asn Ser Ile Met Thr Phe Ile Lys
                275                280                285
Glu Leu Gly Ser Leu Gly Gln Phe Gln Leu Leu Phe Pro Ser Thr Thr
                290                295                300
Pro Gly Ile Gln Ser Leu Met His Glu Phe Tyr Asp Val Ala Asn Pro
305                310                315                320
Val Gly Asn Pro Gly Ser Val Leu Thr Gln Tyr Trp Ser Leu Leu Asn
                325                330                335
Val Phe Glu Gln Phe Gln Phe Met Asn Lys Lys Thr Gln Pro His Pro
                340                345                350
Leu Glu Trp Asn Ser Phe Thr Glu Asp Lys Asn Ile Glu Lys Pro Gln
                355                360                365
Val Pro Phe Asp Ala Ile Glu Asn Lys Lys Ala Ala Val Pro Gln Ile
                370                375                380
Lys Asn Glu Asn Lys Glu Ile His Cys Ser Asp Asp Glu Asn Thr Pro
385                390                395                400
Cys His Ile Lys Gln Ile Phe Thr His Pro His Leu Glu Leu Asn Pro
                405                410                415
Asp Phe His Pro Lys Ile Lys Asp Tyr Tyr Cys Glu Val Pro Phe Asp
                420                425                430
Val Val Thr Val Thr Ile Gly Val Glu Thr Pro Lys Cys Leu Cys Lys
                435                440                445
Val His Leu Tyr Glu Gln Ala Gly Pro Ser
                450                455

```

<210> 1239

<211> 447

<212> DNA

<213> Homo sapiens

<400> 1239

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atacctactg aacgtgaacg aacagaaaagg ctaattaaaa ccaaattaag ggagatcatg
60
atgcagaagg atttggagaa tattacatcc aaagagataa gaacagagtt ggaaatgcaa
120
atgggtgtgca acttgcgagg attcaaggaa tttatagaca atgaaatgat agtgatcctt
180
ggtc aaatgg atagccctac acagatatatt gagcatgtgt tcctggggctc agaattggaat
240
gcctccaact tagaggactt acagaaccga ggggtacagg atatcttgaa tgtcactcga
300
gagatagata actttttccc aggagtcttt gagtatcata acattcgggt atatgatgaa
360
gaggcaacgg atctcctggc gtactggaat gacacttaca aattcatctc taaagcaaa
420
aaacatggat ctaaatgcct tgtgcac
447

```

<210> 1240

<211> 149

<212> PRT

<213> Homo sapiens

<400> 1240

```

Ile Pro Thr Glu Arg Glu Arg Thr Glu Arg Leu Ile Lys Thr Lys Leu
 1             5             10             15
Arg Glu Ile Met Met Gln Lys Asp Leu Asn Ile Thr Ser Lys Glu
 20             25             30
Ile Arg Thr Glu Leu Glu Met Gln Met Val Cys Asn Leu Arg Glu Phe
 35             40             45
Lys Glu Phe Ile Asp Asn Glu Met Ile Val Ile Leu Gly Gln Met Asp
 50             55             60
Ser Pro Thr Gln Ile Phe Glu His Val Phe Leu Gly Ser Glu Trp Asn
 65             70             75             80
Ala Ser Asn Leu Glu Asp Leu Gln Asn Arg Gly Val Arg Tyr Ile Leu
 85             90             95
Asn Val Thr Arg Glu Ile Asp Asn Phe Phe Pro Gly Val Phe Glu Tyr
 100            105            110
His Asn Ile Arg Val Tyr Asp Glu Glu Ala Thr Asp Leu Leu Ala Tyr
 115            120            125
Trp Asn Asp Thr Tyr Lys Phe Ile Ser Lys Ala Lys Lys His Gly Ser
 130            135            140
Lys Cys Leu Val His
 145

```

<210> 1241

<211> 489

<212> DNA

<213> Homo sapiens

<400> 1241

```

acgcgtgtgc agcgtatcca gcaccgtcct cagaataata gctgtgaaaa ggaggaaggg
 60
aactaggcag acagaccgac agataggggg aaaccgggat gttaaatgtg tccgaacaag
 120
taggaagatc aatgaggcgc gagtgtgtgt gtgtacgtgt gcgcgtgtgt gtgtgagaga
 180
gagagaaaga aagaagaaag gtcccgattg caacgtgtca gatcttgcaa ccttcccccc
 240
acccaacaca acaacctca gacacaaaa caccattgct gactgatacc ccaggtcttc
 300
agggttaaa gaaacctgtg ttggcagcgc aattgtgcag acgctgtaag gccaaaacga
 360
ggatttgtgt tgtgaggctg gtggtgcgtt cttttcttct tcttctcgcc tgttttcccg
 420
gagtgcctgg gttgcgagaa aggcgcacgc caggctgtgc agccgaatcg cttcgcaatt
 480
attcatgct
 489

```

<210> 1242

<211> 127

<212> FRT

<213> Homo sapiens

<400> 1242

```

Met Asn Asn Cys Glu Ala Ile Arg Leu His Ser Leu Arg Cys Ala Phe

```

```

      1           5           10           15
Leu Ala Thr Gln Ala Leu Arg Glu Asn Arg Glu Glu Lys Glu Lys
      20           25           30
Asn Ala Pro Pro Thr Ser Gln His Lys Ser Ser Phe Trp Pro Tyr Ser
      35           40           45
Val Cys Thr Ile Ala Leu Pro Thr His Gly Ser Phe Asn Pro Glu Asp
      50           55           60
Leu Gly Tyr Gln Ser Ala Met Val Phe Leu Cys Leu Arg Val Val Val
      65           70           75           80
Leu Gly Gly Gly Lys Val Ala Arg Ser Asp Thr Leu Gln Ser Gly Pro
      85           90           95
Phe Phe Phe Leu Ser Leu Ser Leu Thr His Thr Arg Ala His Val His
      100          105          110
Thr His Thr Arg Ala Ser Leu Ile Phe Leu Leu Val Arg Thr His
      115          120          125

```

<210> 1243

<211> 390

<212> DNA

<213> Homo sapiens

<400> 1243

```

ntagactccg tcgacccct catggagaat ccagtgtgcc aggtcccttc ggcgactactgg
60
gagatgatat acctaccggg aatgttcact gtctacttcg atggccagtt ctgggtcgga
120
gtccttagaga ggcgcgacga ggggttggtg cgtgccgtaa aagtcacgnt tggcgccgaa
180
ccgtctgaca cggaattgta cgggtggggt agccgtcatg gcaacgcact tatagagcga
240
ttggagtcta ccgtgctgt cctaccacc cgcagtcacc gagccaagcg actgaacccc
300
aagagggcgt tacgagatgc agcgcgagct gcccaagcac accgtgccag cacgnccgca
360
caggccgcga ttaaggccga tcaggaagct
390

```

<210> 1244

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1244

```

Xaa Asp Ser Val Asp Pro Leu Met Glu Asn Pro Val Cys Gln Val Pro
      1           5           10           15
Ser Ala Tyr Trp Glu Met Ile Tyr Leu Pro Gly Met Phe Thr Val Tyr
      20           25           30
Phe Asp Gly Gln Phe Trp Val Gly Val Leu Glu Arg Arg Asp Glu Gly
      35           40           45
Leu Val Arg Ala Val Lys Val Thr Phe Gly Ala Glu Pro Ser Asp Thr
      50           55           60
Glu Leu Tyr Gly Trp Val Ser Arg His Gly Asn Ala Leu Ile Glu Arg
      65           70           75           80
Leu Glu Ser Thr Ala Ala Val Pro Thr Thr Arg Ser Pro Arg Ala Lys

```

```

      85              90              95
Arg Leu Asn Pro Lys Arg Ala Leu Arg Asp Ala Ala Arg Ala Ala Gln
      100              105              110
Ala His Arg Ala Ser Thr Xaa Ala Gln Ala Ala Ile Lys Ala Asp Gln
      115              120              125
Glu Ala
      130

```

<210> 1245

<211> 339

<212> DNA

<213> Homo sapiens

<400> 1245

```

gccaaagcagc aaaaccaca gatcattgct atgggaaatg tgtcattttc ttgttcacaa
60
ccacaatcta tgcccgtagc ttttctgagc tccaggagtt ttttagcact gccagacttc
120
ctctggagagg aggaggtttc tgccactttt caatttcgaa cttggaataa ggcaggggctt
180
ctgctgttca gtgaacttca gctgatttca gggggtatcc tcctctttct gagtgatgga
240
aaacttaagt cgaatctcta ccagccaaga aaattaccca gtgacatcac agcagggtgtc
300
gaattaaatg atgggcagtg gcattctgtc tctttatct
339

```

<210> 1246

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1246

```

Ala Lys Gln Gln Lys Pro Gln Ile Ile Ala Met Gly Asn Val Ser Phe
1              5              10              15
Ser Cys Ser Gln Pro Gln Ser Met Pro Val Thr Phe Leu Ser Ser Arg
      20              25              30
Ser Phe Leu Ala Leu Pro Asp Phe Ser Gly Glu Glu Glu Val Ser Ala
      35              40              45
Thr Phe Gln Phe Arg Thr Trp Asn Lys Ala Gly Leu Leu Leu Phe Ser
      50              55              60
Glu Leu Gln Leu Ile Ser Gly Gly Ile Leu Leu Phe Leu Ser Asp Gly
65              70              75              80
Lys Leu Lys Ser Asn Leu Tyr Gln Pro Arg Lys Leu Pro Ser Asp Ile
      85              90              95
Thr Ala Gly Val Glu Leu Asn Asp Gly Gln Trp His Ser Val Ser Leu
      100              105              110
Ser

```

<210> 1247

<211> 366

<212> DNA

<213> Homo sapiens

<400> 1247
 ttgaacctcca acccgggcac ggcatacctg cccagatcc cgatggatgg gcatgacctc
 60
 aaccgggtgt ggcgggacgt cggcctgac gtgcaccgc cgatgctcta catgggctac
 120
 gtccgtttct cctgtgcctt tgcgtttgcc atgcgcgcct tgcctggcgg gcgcctcgat
 180
 gcggcctggg cgcgctggtc gcggccatgg accattgtgg cctgggcggt cctcggtatc
 240
 ggtatcaccc tcggttcgtg gtgggcctac tacgaactcg gctggngcgg cttggtggtc
 300
 tgggaccccg gggaaaaacc ctcttctcatg ccctggcctgg ggggcacccc gctgattcac
 360
 tcgctg
 366

<210> 1248
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 1248
 Leu Thr Ser Asn Pro Gly Thr Arg Ile Leu Pro Gln Ile Pro Met Asp
 1 5 10 15
 Gly His Asp Leu Asn Pro Val Trp Arg Asp Val Gly Leu Ile Val His
 20 25 30
 Pro Pro Met Leu Tyr Met Gly Tyr Val Gly Phe Ser Val Ala Phe Ala
 35 40 45
 Phe Ala Ile Ala Ala Leu Leu Gly Gly Arg Leu Asp Ala Ala Trp Ala
 50 55 60
 Arg Trp Ser Arg Pro Trp Thr Ile Val Ala Trp Ala Phe Leu Gly Ile
 65 70 75 80
 Gly Ile Thr Leu Gly Ser Trp Trp Ala Tyr Tyr Glu Leu Gly Trp Xaa
 85 90 95
 Gly Trp Trp Phe Trp Asp Pro Gly Glu Asn Pro Phe Phe Met Pro Trp
 100 105 110
 Leu Gly Gly Thr Pro Leu Ile His Ser Leu
 115 120

<210> 1249
 <211> 374
 <212> DNA
 <213> Homo sapiens

<400> 1249
 acgcgtgtcc tcaacacctt ggcccccacg ctgattgcgg tggaaacggg gccggcaatg
 60
 ggcgcgcagt tgagcaagct gctgccggat gtgcacctgg tcaatggcac tgcgaggcc
 120
 attccactgg aaagcgccgt ggcggatgcg gtggtgtgcg cacaagcctt ccattggttt
 180
 tccagcgagg cggccctggc ggaatccat cgggtactca aaccggatgg gcgcctgggg
 240

ctgggtgtgga atgtgcgcga cgagtcgggtg gattgggtcg cgcgcattac tcaaatcatc
 300
 acgccttatg aaggcgacac gccgcgcttt cataccggcc gttggcgcgga agccttcact
 360
 ggcgagtatt ttgt
 374

<210> 1250
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 1250
 Thr Arg Val Leu Asn Thr Leu Ala Pro Thr Leu Ile Ala Val Glu Pro
 1 5 10 15
 Val Pro Ala Met Gly Ala Gln Leu Ser Lys Leu Leu Pro Asp Val His
 20 25 30
 Leu Val Asn Gly Thr Ala Glu Ala Ile Pro Leu Glu Ser Ala Val Ala
 35 40 45
 Asp Ala Val Val Cys Ala Gln Ala Phe His Trp Phe Ser Ser Glu Ala
 50 55 60
 Ala Leu Ala Glu Ile His Arg Val Leu Lys Pro Asp Gly Arg Leu Gly
 65 70 75 80
 Leu Val Trp Asn Val Arg Asp Glu Ser Val Asp Trp Val Ala Ala Ile
 85 90 95
 Thr Gln Ile Ile Thr Pro Tyr Glu Gly Asp Thr Pro Arg Phe His Thr
 100 105 110
 Gly Arg Trp Arg Glu Ala Phe Thr Gly Glu Tyr Phe
 115 120

<210> 1251
 <211> 742
 <212> DNA
 <213> Homo sapiens

<400> 1251
 accgtctctt tcctcggaag ggcaggggccg aggggcttgc ggggcagcca tggaggcgac
 60
 gcggaggcgg cagcactgtg gagcgacggg cgcccccaggc gcgcagtgtg gcgcctctct
 120
 ccctcgagggc caggcatggc tctgtgagcg ctgatgaggc tgccccgacg gctcccttcc
 180
 acctcgacct ctgggttctac ttcacactgc agaactgggt tctggacttt gggcgctccca
 240
 ttgacctggt ggtattccct ctgcagtggg ttccactcaa caagcccagt gttggggact
 300
 acttccacat ggctctaac gtcacacgc cctttctctt gctcaagctc atcgagcggt
 360
 cccccgcac cctgctacgc tccatcacgt acgtgagcat catcatcttc atcatgggtg
 420
 ccagcatcca cctggtgggt gactctgtca accaccgctt gctcttcagt ggctaccagc
 480
 accacctgtg tgctcgtgag aaccccatca tcaagaatct caagccggag acgctgatcg
 540

actcctttga gctgctctac tattatgatg agtacctggg tcactgcatg tggatcatcc
 600
 cctctctcct catcctcttc atgtacttca gcggctgctn ttactgcctc taaagctgag
 660
 agcttgatcc cagggcctgc cctgctcctg gtggcaccca gtggcctgta ctactggtac
 720
 ctggtcaccg agggccagat ct
 742

<210> 1252
 <211> 80
 <212> PRT
 <213> Homo sapiens

<400> 1252
 Met Arg Leu Pro Ala Arg Leu Pro Ser Thr Ser Thr Ser Gly Ser Thr
 1 5 10 15
 Ser His Cys Arg Thr Gly Phe Trp Thr Leu Gly Val Pro Leu Pro Cys
 20 25 30
 Trp Tyr Ser Leu Ser Ser Gly Phe His Ser Thr Ser Pro Val Leu Gly
 35 40 45
 Thr Thr Ser Thr Trp Pro Thr Thr Ser Ser Arg Pro Phe Ser Cys Ser
 50 55 60
 Ser Ser Ser Ser Gly Pro Pro Ala Pro Cys Tyr Ala Pro Ser Arg Thr
 65 70 75 80

<210> 1253
 <211> 675
 <212> DNA
 <213> Homo sapiens

<400> 1253
 gggccccctc ccaggcgctt tctgggagct tttagaactg cgctctgaag ttccagaga
 60
 gcgaggagct ttgcggcag gcagagacaa tggaagaaaa tgaaagccag aaatgtgagc
 120
 cgtgccttcc ttactcagca gacagaagac agatgcagga acaaggcaaa ggcaatctgc
 180
 argtaacatc accagaagat gcagaatgcc gcagaaccaa ggaacgcctt tctaattgaa
 240
 acagtcgtgg ttacgtttcc aagctcttccc gcaatatccc aaggagacac acctagggg
 300
 ggccccgaag ttccaaggaa atactgggaa tgcaaacatc tgagatggat cggaagagag
 360
 gaaaaagcgt tcctagaaca tctgaagcag aagtaccccc accacgcctc tgcaatcatg
 420
 ggtcaccaag agaggctgag agaccagaca aggatcccca aactgtctca cagtctctca
 480
 ccaccagtg tgggtgaccc ggtcgagcat ttatcagaga cgtccgctga ttctttggaa
 540
 gccatgtctg agggggatgc tccaacccct tttccagag gcagccggag tcgtcgagagc
 600
 ctctctgttg tgaggtcaac caaccagacg aaagaaagat ctctgggggt tctctatctc
 660

cagtatggag atgaa
675

<210> 1254
<211> 86
<212> PRT
<213> Homo sapiens

<400> 1254
Met Gly His Gln Glu Arg Leu Arg Asp Gln Thr Arg Ile Pro Lys Leu
1 5 10 15
Ser His Ser Pro Gln Pro Pro Ser Val Gly Asp Pro Val Glu His Leu
20 25 30
Ser Glu Thr Ser Ala Asp Ser Leu Glu Ala Met Ser Glu Gly Asp Ala
35 40 45
Pro Thr Pro Phe Ser Arg Gly Ser Arg Thr Arg Ala Ser Leu Pro Val
50 55 60
Val Arg Ser Thr Asn Gln Thr Lys Glu Arg Ser Leu Gly Val Leu Tyr
65 70 75 80
Leu Gln Tyr Gly Asp Glu
85

<210> 1255
<211> 401
<212> DNA
<213> Homo sapiens

<400> 1255
ncgccgatta ccaaggctat ggatgtgtgg gccttgggag taacgctata ctgtctgctg
60
ttcgggtcgag tgccatttga tgcagagacg gactacttgc tgctggaagc tatectgcac
120
gacgattatg ccgtcccgac gcacatgggt agcgaccgag tgcttgtagg ccgcgaccca
180
gcacgttggc cctcgtcgca agagacgccc aacgtgcccg tgctcggcga ggcgcatgca
240
gtacgcccatc tgctcgatgc cttctcgcac aaggatccag cgacgcgcct caactcgcac
300
cgtgtttataa cacacccatg gctcgtggca gagtcatggt aatagtagca attgtatata
360
ccctcatcac caagatggcc aaagcggtag aaggcccgag g
401

<210> 1256
<211> 113
<212> PRT
<213> Homo sapiens

<400> 1256
Xaa Pro Ile Thr Lys Ala Met Asp Val Trp Ala Leu Gly Val Thr Leu
1 5 10 15
Tyr Cys Leu Leu Phe Gly Arg Val Pro Phe Asp Ala Glu Thr Glu Tyr
20 25 30
Leu Leu Leu Glu Ser Ile Leu His Asp Asp Tyr Ala Val Pro Thr His

```

          35          40          45
Met Gly Ser Asp Arg Val Leu Val Gly Pro Arg Pro Ala Arg Trp Pro
  50          55          60
Ser Ser Gln Glu Thr Pro Asn Val Pro Leu Ser Gly Glu Ala His Ala
  65          70          75          80
Val Arg His Leu Leu Asp Ala Leu Leu Asp Lys Asp Pro Ala Thr Arg
          85          90          95
Leu Thr Leu Asp Arg Val Ile Thr His Pro Trp Leu Val Ala Glu Ser
  100          105          110
Trp

```

<210> 1257

<211> 294

<212> DNA

<213> Homo sapiens

<400> 1257

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cgcgctacagc tgattgaagg tgaatgcgcc aacgccgacc tgggtggcgca agccgccatc
  60
ggcgccacagg cgggtggtgca ttggcagcgg gtggcttcgg tgcaagcctc ggtggatgac
  120
ccggtcagca cgcgccagag caattttgtc ggcaccttga atgtctgcga agccatgcgc
  180
aaggccggtg tgaagcgtgt ggtatttgct tccagcgttg cgggttatgg caacaatggc
  240
gagggcgctt cgattgacga agagaccatc aaggccccgc tgacgcctta cgcg
  294

```

<210> 1258

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1258

```

Arg Val Gln Leu Ile Glu Gly Asp Val Ala Asn Ala Asp Leu Val Ala
  1          5          10          15
Gln Ala Ala Ile Gly Ala Thr Ala Val Val His Leu Ala Ala Val Ala
  20          25          30
Ser Val Gln Ala Ser Val Asp Asp Pro Val Ser Thr Arg Gln Ser Asn
  35          40          45
Phe Val Gly Thr Leu Asn Val Cys Glu Ala Met Arg Lys Ala Gly Val
  50          55          60
Lys Arg Val Val Phe Ala Ser Ser Val Ala Val Tyr Gly Asn Asn Gly
  65          70          75          80
Glu Gly Ala Ser Ile Asp Glu Glu Thr Ile Lys Ala Pro Leu Thr Pro
  85          90          95
Tyr Ala

```

<210> 1259

<211> 417

<212> DNA

<213> Homo sapiens

<400> 1259
 nnacactcta gcctctgact caaggaagct gccagggctc ttgccctctg gtttgggggg
 60
 atcccgctctc ccttcgtctg gagcagacat agtgagaacg tgagaagctg caggcgctggc
 120
 ctccaccgtgg tgtgttccaa gatgtccagg gccaaaggatg ccgtgtcctc cgggggtggcc
 180
 agcgtgtgtgg acgtgggctaa gggagtggctc caggagggcc tggacaccac tcggtctgca
 240
 cttacggggc ccaaggaggc ggtgtccagc ggggtcacag gggccatgga catggctaag
 300
 ggggccgtcc aaggggggtct ggacacctcg aaggctgtcc tcaccggcac caaggacagc
 360
 gtgtccactg ggctcacggg ggcagtgaat gtggccaaag ggcccgtaca ggccggc
 417

<210> 1260
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 1260
 Leu Lys Glu Ala Ala Gln Gly Leu Ala Leu Arg Phe Gly Gly Ile Pro
 1 5 10 15
 Ser Pro Phe Val Trp Ser Arg His Ser Glu Asn Val Arg Ser Cys Arg
 20 25 30
 Arg Gly Leu Thr Val Val Cys Ser Lys Met Ser Arg Ala Lys Asp Ala
 35 40 45
 Val Ser Ser Gly Val Ala Ser Val Val Asp Val Ala Lys Gly Val Val
 50 55 60
 Gln Gly Gly Leu Asp Thr Thr Arg Ser Ala Leu Thr Gly Thr Lys Gly
 65 70 75 80
 Ala Val Ser Ser Gly Val Thr Gly Ala Met Asp Met Ala Lys Gly Ala
 85 90 95
 Val Gln Gly Gly Leu Asp Thr Ser Lys Ala Val Leu Thr Gly Thr Lys
 100 105 110
 Asp Thr Val Ser Thr Gly Leu Thr Gly Ala Val Asn Val Ala Lys Gly
 115 120 125
 Pro Val Gln Ala Gly
 130

<210> 1261
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 1261
 ngtgcacgtg ccgttcggca tcaggagatg aacatggatt tgaacgtga agtcgatcag
 60
 ctggctccgcc aatcccgacac ctggatcccc ttgatcatgg agtacggcag ccgcctgctg
 120tgaccctggc ggtcggctgg tggatcgaca acaaggctcag cgcccgcctg 180
 ggcaaaactgg taggcctgcg caacgccgac ctggcactgc aaggctttat cagcaccttg
 240

togaacatcg ggctgaaagt gctgctgttc gtcagtgtgg cgtcgatgat cggcattgag
 300
 accacctcgt tcgtcgcgga catcgggtgct
 330

<210> 1262

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1262

Xaa	Ala	Arg	Ala	Val	Arg	His	Gln	Glu	Met	Asn	Met	Asp	Leu	Asn	Ala
1			5					10					15		
Glu	Val	Asp	Gln	Leu	Val	Arg	Gln	Ser	Gln	Thr	Trp	Ile	Pro	Leu	Ile
		20						25				30			
Met	Glu	Tyr	Gly	Ser	Arg	Leu	Leu	Leu	Ala	Leu	Leu	Thr	Leu	Ala	Val
		35				40					45				
Gly	Trp	Trp	Ile	Asp	Asn	Lys	Val	Ser	Ala	Arg	Leu	Gly	Lys	Leu	Val
	50				55				60						
Gly	Leu	Arg	Asn	Ala	Asp	Leu	Ala	Leu	Gln	Gly	Phe	Ile	Ser	Thr	Leu
65			70					75						80	
Ser	Asn	Ile	Gly	Leu	Lys	Val	Leu	Leu	Phe	Val	Ser	Val	Ala	Ser	Met
			85					90					95		
Ile	Gly	Ile	Glu	Thr	Thr	Ser	Phe	Val	Ala	Asp	Ile	Gly	Ala		
			100					105					110		

<210> 1263

<211> 351

<212> DNA

<213> Homo sapiens

<400> 1263

acgcgtggac gatggacttc gtcggtctgc ggtacgacga agggctcaac attgccggtg
 60
 gcatogatga tgagtttgct cgcctgggca acacctagca gcaatggcat cgatagtccc
 120
 tgcccagcct gtccatttc gacgacgatg tcgcgcgggt tcagtttctt ctgcgtccac
 180
 gtcaacagac cgtcaccgtg gttgacgac tcgccggtgg aggcgtctct gacgacgatc
 240
 tggccacgcg ccaggggaata catctcccca tccacccaaa agaacgcccc caagctggggc
 300
 atcttgccca gcccgatgat cgagagggtt tcaacaagcg actcgggata c
 351

<210> 1264

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1264

Met	Pro	Ser	Leu	Gly	Ala	Phe	Phe	Trp	Val	Asp	Gly	Glu	Met	Tyr	Ser
1			5					10				15			
Leu	Ala	Arg	Gly	Gln	Ile	Val	Val	Lys	Asp	Ala	Ser	Thr	Gly	Glu	Ile

	20		25		30
Val	Asn	His	Gly	Asp	Gly
	35		40		45
Pro	Ala	Thr	Ile	Val	Val
	50		55		60
Met	Pro	Leu	Leu	Gly	Val
	65		70		75
Ala	Thr	Gly	Asn	Val	Glu
			85		90
His	Arg	Pro	Arg		
			100		

<210> 1265

<211> 318

<212> DNA

<213> Homo sapiens

<400> 1265

accggtgtat gcaactgaaa tgctgtccga tatgctgcg ctccagctcg tgaatcgaaa
 60
 gtggtataac gctcgtttgg tggaatcgtc gctacggaag cttatcaagg atacggatgc
 120
 tgctgcaccg ccaaaattat ggacgcccc cgaccccaact cgtctgacg ataccattgc
 180
 acagccgaaa gtgcaaccag cccaagcagt gggagatgac tcgatcatgt cggtcgatga
 240
 gctgatgca accgtccatg acatgccact caccacgaca ctgcacaacg tgggtcgctc
 300
 agatccatcg cgacgcgt
 318

<210> 1266

<211> 99

<212> PRT

<213> Homo sapiens

<400> 1266

Met	Leu	Ser	Asp	Met	Pro	Ala	Leu	Gln	Leu	Val	Asn	Arg	Lys	Leu	Asp
1				5				10						15	
Asn	Ala	Arg	Leu	Val	Glu	Ser	Ser	Leu	Arg	Lys	Leu	Ile	Lys	Asp	Thr
	20							25					30		
Asp	Ala	Ala	Ala	Pro	Pro	Lys	Leu	Trp	Thr	Pro	Pro	Asp	Pro	Thr	Arg
	35						40					45			
Ser	Asp	Asp	Thr	Ile	Ala	Gln	Pro	Lys	Val	Gln	Pro	Ala	Gln	Ala	Val
	50					55				60					
Gly	Asp	Asp	Ser	Ile	Met	Ser	Val	Asp	Glu	Pro	Asp	Ala	Thr	Val	His
	65				70				75					80	
Asp	Met	Pro	Leu	Thr	Thr	Thr	Leu	Asp	Asn	Val	Gly	Arg	Ser	Asp	Pro
			85						90					95	
Ser	Arg	Arg													

<210> 1267

<211> 343

<212> DNA

<213> Homo sapiens

<400> 1267

nggacacttg tgggaaatgc cccacagcct gtgtttttat tccccttggt aacacttggt
 60
 ggaactgtcc caccgcccgt gttctgtgac gcctgcagac actcgtggga aatgccccac
 120
 aacctgtggt tttgttcccc ttgtgaacac tcgtgggaaa tgccccacaa cctgtgtttt
 180
 tattccccct gtgaacactc gtgggaaatg tcccatggcc cgtgtttccg tgacactgag
 240
 gatactcacc aaacaccagg ctgtcattgg ggacagggtg agctctggct gttggtgacg
 300
 catggtagga agagcaccaa gtcctggact ctgttgattt ata
 343

<210> 1268

<211> 106

<212> PRT

<213> Homo sapiens

<400> 1268

Met	Pro	His	Ser	Leu	Cys	Phe	Tyr	Ser	Pro	Cys	Glu	His	Leu	Trp	Glu
1				5					10				15		
Leu	Ser	His	Gly	Pro	Cys	Phe	Cys	Ala	Pro	Ala	Asp	Thr	Arg	Gly	Lys
			20					25				30			
Cys	Pro	Thr	Thr	Cys	Val	Phe	Val	Pro	Leu	Val	Asn	Thr	Arg	Gly	Lys
		35				40					45				
Cys	Pro	Thr	Thr	Cys	Val	Phe	Ile	Pro	Leu	Val	Asn	Thr	Arg	Gly	Lys
		50				55					60				
Cys	Pro	Met	Ala	Arg	Val	Ser	Val	His	Leu	Arg	Ile	Leu	Ile	Lys	His
65				70				75						80	
Gln	Ala	Val	Ile	Gly	Asp	Arg	Val	Ser	Ser	Gly	Cys	Trp	Cys	Ser	Met
			85					90						95	
Val	Gly	Arg	Ala	Pro	Ser	Pro	Gly	Leu	Cys						
			100					105							

<210> 1269

<211> 391

<212> DNA

<213> Homo sapiens

<400> 1269

tcgcgatccg gagcgatcgg tgctgcagat ggctggcgac gccctgcggg gcgcattgag
 60
 ggacgcccag ctggagccgg ccgcccctaga cgggctgacg gtccagggtg ggtccccccg
 120
 cggcgccgac tacgacaccg tgctccgaaac ctttggtctt togccacaat tctgcagcca
 180
 gacctggggg gcacggccgg ttcaccgcaa cgggtgacct ggcagcggcc atggcggtgt
 240
 ccagcggcct cgcgcggcgg gtggcttgcc tcatgggcat gaagaattcg gacctcgggc
 300

ggttggtgga ggcggacaat ccctttcatt atgagcaatt ccgggagaat ggcgggccgc
 360
 acggggaaga ggggtggatc ggcattggcct c
 391

<210> 1270
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 1270
 Met Met Lys Gly Ile Val Arg Leu Thr Gln Pro Pro Glu Val Arg Ile
 1 5 10 15
 Leu His Ala His Glu Ala Ser His Pro Pro Arg Glu Ala Ala Gly His
 20 25 30
 Arg His Gly Arg Cys Gln Asp His Arg Cys Gly Glu Pro Ala Val Arg
 35 40 45
 Pro Arg Ser Gly Cys Arg Ile Val Ala Lys Asp Gln Arg Phe Arg Thr
 50 55 60
 Arg Cys Arg Ser Pro Arg Arg Gly Gly Thr Pro Gly Arg Ser Ala
 65 70 75 80
 Arg Leu Gly Arg Pro Ala Pro Gly Arg Arg Pro Ala Met Arg Pro Ala
 85 90 95
 Gly Arg Arg Gln Pro Ser Ala Ala Pro Ile Ala Pro Asp Arg
 100 105 110

<210> 1271
 <211> 661
 <212> DNA
 <213> Homo sapiens

<400> 1271
 acgcgtcggt actggccacc tgcgagcgca ccagggtagg cagcactcgg tctccgtcga
 60
 accagaaagc gtcacggggg tggtagaaga gaacggggcga tgttgtggtg ggacggataa
 120
 ccccggttg cgtcaccata tggcccaact aagagttcac cagggttgat ttaccagccc
 180
 cggtcgaccc tctaccacc gccagaagcg gcgcacatca agtctctaa cgcggcaaaa
 240
 tatagtcgtt aagctgggta gcgatgcgtc gtgccagccc ggccctgagta atagcctccg
 300
 gcaaatccaa ggggaactgg gcctgacgca ggttgtgccc cagatcggtc aacgacagca
 360
 gtatctgctc agtgttcatg gtgaccttc ctggtcactc gtcaggcctg tggcgcgccc
 420
 cactgcaact ogttgttgac cggctggttg cgacgtcgct tgaggaaatgc gggcagttct
 480
 ggcttcgaca atttggcacc tcgggcgacg gtgatagccg ccgggcgcag cacgttcata
 540
 cggttgatga gctcgatctg aagcggacca ggatcatcgt ccaacccacg cacaatggcg
 600
 tcacgaagat aagcaagatc tgtcccaacg cgcaggaaat ctaacgtgtg ccacaccgg
 660

t
661

<210> 1272
<211> 126
<212> PRT
<213> Homo sapiens

<400> 1272
Met Asn Thr Glu Gln Ile Leu Leu Ser Leu Thr Asp Leu Arg His Asn
1 5 10 15
Leu Arg Gln Ala Gln Phe Pro Leu Asp Leu Pro Glu Ala Ile Thr Gln
20 25 30
Ala Gly Leu Ala Arg Arg Ile Ala Asn Gln Leu Asn Asp Tyr Ile Leu
35 40 45
Pro Arg Leu Glu Thr Ile Asp Ala Pro Leu Leu Ala Val Val Gly Gly
50 55 60
Ser Thr Gly Ala Gly Lys Ser Thr Leu Val Asn Ser Leu Val Gly His
65 70 75 80
Met Val Thr Gln Pro Gly Val Ile Arg Pro Thr Thr Thr Ser Pro Val
85 90 95
Leu Val His His Pro Asp Asp Ala Phe Trp Phe Asp Gly Asp Arg Val
100 105 110
Leu Pro Thr Leu Val Arg Ser Gln Val Ala Ser Asn Asp Ala
115 120 125

<210> 1273
<211> 489
<212> DNA
<213> Homo sapiens

<400> 1273
gccggcgaga cgggtgccgg aaagaccatg gtggtcaccc gtattgggtt gctgctggc
60
gacaaggctg acactggatt ggtccggcat ggctgcgac gtgcccgtct cgaagccgtt
120
ctcgacacgc ctgatgccgg tcgcgtcagc gagcttggcg gaacagtcga ggatgggtgag
180
gttatctcgg ctcgacacat cacgagtcgt cgctctcgag cgctgcttgg aggagctcaa
240
gttaccgccta gtcagctggc ccacatcggt ggggatcagg tgaccatcca tggccaatct
300
gaacaagtga ggttggtcga cgcagcgcgg cagctcgacg tcgttgacgg ggctgccgga
360
gatgagctgg caggctacct aagtcgacat gcacagctgt ggtcggagtt tcgtgctgca
420
tcccagcgtc ttcagcgctt caacgaggat cgcgctgggg ccgagatgga acgagaggtg
480
cttacgcgt
489

<210> 1274
<211> 163
<212> PRT

<213> Homo sapiens

<400> 1274

Ala Gly Glu Thr Gly Ala Gly Lys Thr Met Val Val Thr Gly Ile Gly
 1 5 10 15
 Leu Leu Leu Gly Asp Lys Ala Asp Thr Gly Leu Val Arg His Gly Cys
 20 25 30
 Asp Arg Ala Val Val Glu Ala Val Leu Asp Thr Pro Asp Ala Gly Arg
 35 40 45
 Val Ser Glu Leu Gly Gly Thr Val Glu Asp Gly Glu Val Ile Cys Ala
 50 55 60
 Arg His Ile Thr Ser Arg Arg Ser Arg Ala Leu Leu Gly Gly Ala Gln
 65 70 75 80
 Val Thr Ala Ser Gln Leu Ala His Ile Val Gly Asp Gln Val Thr Ile
 85 90 95
 His Gly Gln Ser Glu Gln Val Arg Leu Val Asp Ala Ala Arg Gln Leu
 100 105 110
 Asp Val Val Asp Arg Ala Ala Gly Asp Glu Leu Ala Gly Tyr Leu Ser
 115 120 125
 Arg His Ala Gln Leu Trp Ser Glu Phe Arg Ala Ala Ser Gln Arg Leu
 130 135 140
 Gln Arg Leu Asn Glu Asp Arg Ala Gly Ala Glu Met Glu Arg Glu Val
 145 150 155 160
 Leu Thr Arg

<210> 1275

<211> 384

<212> DNA

<213> Homo sapiens

<400> 1275

nngctagcaa gtgcaagtac gagcaaaagt tatcagcaac agcgggaggc tgaacttctc
 60
 gtcgcacggc tagaggggga aatgcacgca cacacgcacc cgaccccgtc gccacaacca
 120
 cccgaggatg cagggttgat tgatgttgcc ctgaaagagg cgaagaagc ctttgatgaa
 180
 ggcaaggtcg atctaattgga taaactcaat caggagatgc ttgcctggc aaacgaattc
 240
 ggtgcgcctg ggcttgaatc tattgagctt ggctccgacg cgaagatggc agtacgcaaa
 300
 ggcaatcaga aatcagcggt cagcaggctg actcccggtg aacgtctcag gctgcgcatt
 360
 gctacagcca tcgcgttggt acgc
 384

<210> 1276

<211> 128

<212> PRT

<213> Homo sapiens

<400> 1276

Xaa Leu Ala Ser Ala Ser Thr Ser Lys Ser Tyr Gln Gln Gln Arg Glu

```

1           5           10           15
Ala Glu Leu Leu Val Ala Arg Leu Glu Gly Glu Met His Ala His Ser
20           25           30
Asp Pro Thr Pro Ser Pro Gln Pro Pro Glu Asp Ala Gly Leu Ile Asp
35           40           45
Val Ala Leu Lys Glu Ala Lys Lys Ala Phe Asp Glu Gly Lys Val Asp
50           55           60
Leu Met Asp Lys Leu Asn Gln Glu Ile Leu Arg Leu Ala Asn Glu Phe
65           70           75           80
Gly Ala Leu Gly Leu Glu Ser Ile Glu Leu Gly Ser Asp Ala Lys Met
85           90           95
Ala Val Arg Lys Gly Asn Gln Lys Ser Ala Phe Ser Arg Leu Thr Pro
100          105          110
Gly Glu Arg Leu Arg Leu Arg Ile Ala Thr Ala Ile Ala Leu Leu Arg
115          120          125

```

<210> 1277

<211> 392

<212> DNA

<213> Homo sapiens

<400> 1277

```

cagtttcagc cccgctgtgt gtccccaatt cctgtctctc ctaccagccg gattcagaac
60
ccagtggtt tcttcagctc tgttctgcct tctctccctg ccatccacc cacaaatgcc
120
atgggggtgc ctagaagtgc accatccatg ccatccagg gattagcgaa gaaaaataca
180
aagtctcttc aaccagtgaa tgatgataac attcgtgaaa ctaagaacgc agtgattcgga
240
gacttgggga aaaaaataac ttctcagtgt gtcagaccaa accagcagga gtacaaaatt
300
tcaagctttg agcagaggct gatgaatgaa atagagtttc gcttggaacg tactcctgtt
360
gatgaatcac atgatgaaat tcaacatgat gg
392

```

<210> 1278

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1278

```

Gln Phe Gln Pro Arg Cys Val Ser Pro Ile Pro Val Ser Pro Thr Ser
1           5           10           15
Arg Ile Gln Asn Pro Val Ala Phe Leu Ser Ser Val Leu Pro Ser Leu
20           25           30
Pro Ala Ile Pro Pro Thr Asn Ala Met Gly Leu Pro Arg Ser Ala Pro
35           40           45
Ser Met Pro Ser Gln Gly Leu Ala Lys Lys Asn Thr Lys Ser Pro Gln
50           55           60
Pro Val Asn Asp Asp Asn Ile Arg Glu Thr Lys Asn Ala Val Ile Arg
65           70           75           80
Asp Leu Gly Lys Lys Ile Thr Phe Ser Asp Val Arg Pro Asn Gln Gln

```

```

      85              90              95
Glu Tyr Lys Ile Ser Ser Phe Glu Gln Arg Leu Met Asn Glu Ile Glu
      100              105              110
Phe Arg Leu Glu Arg Thr Pro Val Asp Glu Ser His Asp Glu Ile Gln
      115              120              125
His Asp
      130

```

<210> 1279
 <211> 297
 <212> DNA
 <213> Homo sapiens

```

<400> 1279
atggagtcgc agactctccg ccacatgacg gaggacgact gcgccgacaa cggcatccca
60
ctccccaacg tcaactccag gatcctctct aaggctcatcg agtactgcaa cagtcacgtc
120
cacgccgcgc ccaaaccgcg tgaactccgct gcctccgagg gcggcgagga cctcaagagc
180
tggggacgcga agttcgtcaa ggtggaccag gctacgctct tcgacctcat cctggctgccc
240
aactatctga acatcaaggg attgctggac ctgacctgcc agacgggtgc tgacatg
297

```

<210> 1280
 <211> 99
 <212> PRT
 <213> Homo sapiens

```

<400> 1280
Met Glu Ser Gln Thr Leu Arg His Met Ile Glu Asp Asp Cys Ala Asp
1      5      10      15
Asn Gly Ile Pro Leu Pro Asn Val Asn Ser Arg Ile Leu Ser Lys Val
20     25     30
Ile Glu Tyr Cys Asn Ser His Val His Ala Ala Ala Lys Pro Ala Asp
35     40     45
Ser Ala Ala Ser Glu Gly Gly Glu Asp Leu Lys Ser Trp Asp Ala Lys
50     55     60
Phe Val Lys Val Asp Gln Ala Thr Leu Phe Asp Leu Ile Leu Ala Ala
65     70     75     80
Asn Tyr Leu Asn Ile Lys Gly Leu Leu Asp Leu Thr Cys Gln Thr Gly
85              90              95
Ala Asp Met

```

<210> 1281
 <211> 515
 <212> DNA
 <213> Homo sapiens

```

<400> 1281
acgcgtgaag ggggctttgg aggggatggc ttctggactg cacgatgggt gaacacagtt
60

```

ttttaaacctc ttttccacat ctgtataggt ttgaaaatta tcaacaacac atggggaggg
 120
 tggcgtgccca ggtcatggct gcctggagcc cttctgagga gggccggctc aaccgaggac
 180
 gccctcccca ctaccaagta ggcactgcgg gcaggagtcg ccacccccac cccaagggaag
 240
 ttcaagaacag gcaacaggag gagcctgact ccaacagagt tgggtgtcatc cggtgcgtatg
 300
 ctaaggacgt cacaacacat caactctggg agcccaaggg ggtgtgtggt ccaactcaagg
 360
 ggaagatgat ccagaagctc tgctccctcc ctttgccttt gaagaacaca ggagtgcacac
 420
 gtggggaatc taccggctta atttcttctt agtaacaggc atagtaggat caaaaaaatt
 480
 ttgcttctaa tttttaaaaa cattcaatgt gtaca
 515

<210> 1282

<211> 135

<212> PRT

<213> Homo sapiens

<400> 1282

Met Gly Glu His Ser Phe Leu Asn Ser Phe Pro His Leu Tyr Arg Phe
 1 5 10 15
 Glu Asn Tyr Gln Gln Leu Met Gly Arg Val Ala Cys Gln Val Met Ala
 20 25 30
 Ala Trp Ser Pro Ser Glu Glu Gly Arg Leu Asn Arg Gly Arg Pro Pro
 35 40 45
 His Tyr Gln Val Gly Thr Ala Gly Arg Ser Arg His Pro His Pro Lys
 50 55 60
 Glu Val Gln Asn Arg Gln Gln Glu Glu Pro Asp Ser Asn Arg Val Gly
 65 70 75 80
 Val Ile Arg Arg Ile Ala Lys Asp Val Thr His Gln Leu Trp Glu
 85 90 95
 Pro Lys Gly Val Cys Gly Pro Leu Lys Gly Lys Met Ile Gln Lys Leu
 100 105 110
 Cys Ser Leu Pro Leu Leu Leu Lys Asn Thr Gly Val Thr Arg Gly Glu
 115 120 125
 Ser Thr Gly Leu Ile Ser Ser
 130 135

<210> 1283

<211> 296

<212> DNA

<213> Homo sapiens

<400> 1283

gaattccctca caatgaactg cagtgtctgg aggaccagtt gggtagcctt actccgggtc
 60
 tccactgcag aacttatata tatatgcttt gtgcacacaa agaaaaacag cagcccaaaa
 120
 gaatccggcg tggggctctt aggaggagg aaagttccca caggttaact actggttaat
 180

tttaagagc tcaggaaagg aaggaaggat ggctttttct ctgtgagtc aagacaaggt
 240
 cctgatgata accctcccag atcagaacgt aactttcaac ccacgagtc tgctcn
 296

<210> 1284

<211> 94

<212> PRT

<213> Homo sapiens

<400> 1284

Met	Asn	Cys	Ser	Val	Trp	Arg	Thr	Ser	Trp	Val	Ala	Leu	Leu	Arg	Val
1				5					10				15		
Ser	Thr	Ala	Glu	Leu	Ile	His	Ile	Cys	Phe	Val	His	Thr	Lys	Lys	Asn
		20						25					30		
Ser	Ser	Pro	Lys	Glu	Ser	Arg	Leu	Gly	Leu	Gly	Gly	Arg	Lys	Val	
		35					40				45				
Pro	Thr	Gly	Asn	Ser	Leu	Val	Asn	Phe	Lys	Glu	Leu	Arg	Lys	Gly	Arg
	50					55					60				
Lys	Asp	Gly	Phe	Phe	Ser	Cys	Glu	Ser	Arg	Gln	Gly	Pro	Asp	Asp	Asn
65				70						75				80	
Pro	Pro	Arg	Ser	Glu	Arg	Asn	Phe	Gln	Pro	Thr	Ser	Ala	Ala		
				85						90					

<210> 1285

<211> 526

<212> DNA

<213> Homo sapiens

<400> 1285

gggccccttc ttacctgcc cttccccgtg ccaccaaccc gtagacaggg agggcaagca
 60
 gtgaaagggtc catctagagg aggtaaaaga caggggctgag ggaaaacgcc ttgtacagtc
 120
 aggatggcag atgtactctg tcagggaaga cagccccaca gaaaaggctc ggcttgccca
 180
 agaagcaaca aaagggattc tacacctcag accagggagg gggaatgtgt acaaagattg
 240
 gatttactaa attcagagcc acagactttc aggtacttcg gtgaagatca gtgctctttc
 300
 aaacccacac ttacagaggca ggctttaaaa cgctgactt ctgtcagggg cacaggctgg
 360
 gctgcccaca gctcctacgg ggctggggga tcagagagag gacttcccac tagtccaaga
 420
 tgtgggtgact agtttcaagc cagagattga ggagcagacc tgatgccctt tcggggccctt
 480
 gctaagaacc tgattcaggg aaaaggaagt gaagacagta acgcgt
 526

<210> 1286

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1286

```

Met Ala Asp Val Leu Cys Gln Gly Arg Gln Pro His Arg Lys Gly Ser
 1           5           10           15
Ala Trp Pro Arg Ser Asn Lys Arg Asp Ser Thr Pro Gln Thr Arg Glu
 20           25           30
Gly Glu Cys Val Gln Arg Leu Asp Leu Leu Asn Ser Glu Pro Gln Thr
 35           40           45
Phe Arg Tyr Phe Gly Glu Asp Gln Cys Ser Phe Lys Pro Thr Leu Gln
 50           55           60
Arg Gln Ala Leu Lys Arg Leu Thr Ser Val Arg Ala Thr Gly Trp Ala
 65           70           75           80
Ala Gln Ser Ser Tyr Gly Ala Gly Gly Ser Glu Arg Gly Leu Pro Thr
 85           90           95
Ser Pro Arg Cys Gly Asp
100

```

<210> 1287

<211> 333

<212> DNA

<213> Homo sapiens

<400> 1287

```

acgcgtgaag gggagaggca gctccaggtg gaggggaagtg catgaggaag cagagaggca
60
ggcgacaggc agcgtggctg gggctgggca ggccttcacg ttgattgca gccacagaggt
120
caggtgagaa gaaggtacaa caagcaagga aggccccagg aagccactgg ggggtgttga
180
gccattgaat attctggatt ttaggacatt tctgtggctg actccactgc catcagagtt
240
catccacccc aactccagcc tgagagtgtc ggggcactgg gcactccgga attttcaaa
300
gctctgatgc aacatgtccc caggggtgtct gac
333

```

<210> 1288

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1288

```

Met Leu His Gln Ser Phe Glu Glu Phe Arg Ser Ala Gln Cys Pro Ser
 1           5           10           15
Thr Leu Arg Leu Glu Leu Gly Trp Met Asn Ser Asp Gly Ser Gly Val
 20           25           30
Ser His Arg Asn Val Leu Lys Ser Arg Ile Phe Asn Gly Ser Asn Thr
 35           40           45
Pro Ser Gly Phe Leu Gly Pro Ser Leu Leu Val Val Pro Ser Ser His
 50           55           60
Leu Thr Ser Gly Leu Gln Ser Asn Trp Lys Ala Cys Pro Ala Pro Ala
 65           70           75           80
Thr Leu Pro Val Ala Cys Leu Ser Ala Ser Ser Cys Thr Ser Leu His
 85           90           95
Leu Glu Leu Pro Leu Pro Phe Thr Arg

```

100

105

<210> 1289
 <211> 336
 <212> DNA
 <213> Homo sapiens

<400> 1289
 acgcgtgtct gtgtacaggt ggaaggggat gggatatgaga tgggtgcagcg tgtgcatggg
 60
 cacggcgat ggtgtgtgag tgcactcgtg tgccggagag ctgtaagctg ctggctgagt
 120
 cctgcacggg ggaggaggca aggtggcccc tgccgtgtggg cacagagccc accttccggg
 180
 ccagcccag gcccctttcc cagagccccc tcccaagggg ccataccacc tgcattcccca
 240
 agatggcgtg gggcgctccct ggtgcaggag caggggacag tcagggaggc gtgtggcggg
 300
 cagtagcagc cccccagccc ccttcccccc accggt
 336

<210> 1290
 <211> 89
 <212> PRT
 <213> Homo sapiens

<400> 1290
 Met Val Cys Glu Cys Thr Arg Val Pro Glu Ser Cys Lys Leu Leu Ala
 1 5 10 15
 Glu Ser Cys Thr Val Glu Glu Ala Arg Trp Pro Leu Pro Val Gly Thr
 20 25 30
 Glu Pro Thr Phe Arg Ser Ser Pro Arg Pro Leu Ser Gln Ser Pro Leu
 35 40 45
 Pro Arg Gly His Thr Thr Cys Ile Pro Lys Met Ala Trp Gly Val Pro
 50 55 60
 Gly Ala Gly Ala Gly Asp Ser Gln Gly Gly Val Trp Arg Thr Val Ala
 65 70 75 80
 Ala Pro Gln Pro Pro Ser Pro His Arg
 85

<210> 1291
 <211> 379
 <212> DNA
 <213> Homo sapiens

<400> 1291
 tggccatcca cctctgtcag ctgttccggc aaccattca gatcattgtg gtagtaacga
 60
 atctttctgca acggccggc accgtccacg cgagccagag gttgatagcc ttcatcctca
 120
 taaacgtaca ggcttgtctg gctgtgttta tgcctcctgca ataaccgcaa accatcccg
 180
 gtataccggg tttcccccaa cggataccca tcaactccat gctcggtttt ttcatccga
 240

cgccccagcg ggtcatacac catcctgacc acgtaccat cgtcattacg cacttcaacc
 300
 agccggcttt cagcgtcata cgcaaacgcg tgcacgccac gcttggcaet gcgcttctcg
 360
 accatccgcc caaacgcgt
 379

<210> 1292

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1292

Met	Val	Glu	Lys	Arg	Ser	Ala	Lys	Arg	Gly	Val	Gln	Arg	Phe	Ala	Tyr
1			5						10				15		
Asp	Ala	Glu	Ser	Arg	Leu	Val	Glu	Val	Arg	Asn	Asp	Asp	Gly	Ser	Val
		20						25				30			
Val	Arg	Met	Val	Tyr	Asp	Pro	Leu	Gly	Arg	Arg	Ile	Glu	Lys	Thr	Glu
		35					40				45				
His	Gly	Ser	Asp	Gly	Tyr	Pro	Leu	Gly	Glu	Thr	Arg	Phe	Thr	Trp	Asp
	50				55				60						
Gly	Leu	Arg	Leu	Leu	Gln	Glu	His	Lys	His	Ser	Gln	Thr	Ser	Leu	Tyr
65				70					75				80		
Val	Tyr	Glu	Asp	Glu	Gly	Tyr	Gln	Pro	Leu	Ala	Arg	Val	Asp	Gly	Ala
		85						90					95		
Gly	Pro	Leu	Gln	Lys	Ile	Arg	Tyr	Tyr	His	Asn	Asp	Leu	Asn	Gly	Leu
		100					105					110			
Pro	Glu	Gln	Leu	Thr	Glu	Val	Asp	Gly							
		115					120								

<210> 1293

<211> 340

<212> DNA

<213> Homo sapiens

<400> 1293

nngccggcgc cccgagagct gttcagggcg tgccgcaacg gggacgtgga acgagtcaag
 60
 aggcctggta cgccctgagaa ggtgaacagc cgccacacgg cgggcaggaa atccaccccg
 120
 ctgcactcttg ccgcagggtt tgggcggaaa gacgtagtgt aatatttgct tcagaatgggt
 180
 gcaaatgtcc aagcacgtga tgatgggggc cttattcctc ttcataatgc atgctctttt
 240
 ggtcatgctg aagtagtcaa tctctttttg cgacatgggt cagaccccaa tgcttgagat
 300
 aattggaatt atactcctag aggggtggagt gtgctcgcca
 340

<210> 1294

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1294

Xaa Pro Ala Ala Arg Glu Leu Phe Glu Ala Cys Arg Asn Gly Asp Val
 1 5 10 15
 Glu Arg Val Lys Arg Leu Val Thr Pro Glu Lys Val Asn Ser Arg Asp
 20 25 30
 Thr Ala Gly Arg Lys Ser Thr Pro Leu His Phe Ala Ala Gly Phe Gly
 35 40 45
 Arg Lys Asp Val Val Glu Tyr Leu Leu Gln Asn Gly Ala Asn Val Gln
 50 55 60
 Ala Arg Asp Asp Gly Gly Leu Ile Pro Leu His Asn Ala Cys Ser Phe
 65 70 75 80
 Gly His Ala Glu Val Val Asn Leu Leu Leu Arg His Gly Ala Asp Pro
 85 90 95
 Asn Ala

<210> 1295

<211> 351

<212> DNA

<213> Homo sapiens

<400> 1295

ggatcccgga gacctcgtcg gcgaacgtca cctcgtccag ggccgaggcg cggaacaccg
 60
 acgtgtgat gccctcgccc tcgatgcagt cggtcagcgg tacgacggcg ccgcgaggagg
 120
 cgaagggtgcc gatctggctg cgctcggcgt agaccagcga cggcggttcg cccgacgccca
 180
 cggaggagag gaaactgctg atgtcgagggt caccctcgat cagcttgacc ttggcgctgc
 240
 cgagctcttc ctctgcccgg tcgagccgca ccgtcgcgat ctgctgccg gcaccgaagc
 300
 ccatcacctc gacctcgccg gagagcttcg ccccgctgtc gaaagacgcg t
 351

<210> 1296

<211> 75

<212> PRT

<213> Homo sapiens

<400> 1296

Gly Ser Arg Arg Pro Arg Arg Arg Thr Ser Pro Arg Pro Gly Pro Arg
 1 5 10 15
 Arg Gly Thr Pro Thr Cys Arg Cys Pro Arg Pro Arg Cys Ser Arg Ser
 20 25 30
 Ala Val Arg Arg Arg Arg Gly Arg Arg Arg Cys Arg Ser Gly Cys Ala
 35 40 45
 Arg Arg Arg Pro Ala Thr Ala Val Arg Pro Thr Pro Arg Arg Arg Gly
 50 55 60
 Thr Ala Gly Cys Arg Gly His Pro Arg Ser Ala
 65 70 75

<210> 1297

<211> 356

<212> DNA

<213> Homo sapiens

<400> 1297

gtgcaccggtg attccattg ccaccgactt cgagtaaaact ccagtccoga ggacacgaga
 60
 gacacccagg cctcaggccc catgggcaag ctccacgcca cggctcctac cagagggaca
 120
 gatacactct acaaatctcg gggcccacca caccaagaag acacggagga gccacaacaaa
 180
 gaaggacat acgaaatgca cccccaaagc aaccaaccaa tccaagaaaa aatagctctc
 240
 agggttctgt gggccctctt gcatgggctg cctgcccccc ctgttctggc ctggctcaag
 300
 caccttacc cagcctgctc gaaagagccc tggctaccag agcagagcac tggcct
 356

<210> 1298

<211> 91

<212> PRT

<213> Homo sapiens

<400> 1298

Met	Gly	Thr	Leu	His	Ala	Thr	Ala	Pro	Thr	Arg	Gly	Thr	Asp	Thr	Leu
1				5					10				15		
Tyr	Lys	Ser	Arg	Gly	Pro	Pro	His	Gln	Glu	Asp	Thr	Glu	Glu	Pro	Thr
			20					25				30			
Lys	Glu	Gly	Pro	Tyr	Glu	Met	His	Pro	Gln	Ser	Asn	Gln	Pro	Ile	Gln
			35				40					45			
Glu	Lys	Ile	Arg	Leu	Arg	Val	Leu	Trp	Ala	Leu	Leu	His	Gly	Leu	Pro
			50			55					60				
Cys	Pro	Pro	Val	Leu	Ala	Trp	Leu	Lys	His	Leu	Thr	Pro	Ala	Cys	Ser
65				70					75					80	
Lys	Glu	Pro	Trp	Leu	Pro	Glu	Gln	Ser	Thr	Gly					
				85					90						

<210> 1299

<211> 307

<212> DNA

<213> Homo sapiens

<400> 1299

ggatccactt ctaagatgtc tcaactcacgt ggtgatggca gcaggcctca gactctgggtg
 60
 gttgttggtgca ggaatgtctca gttccttgcc atgtgggtct ctacacaggg cagctctctg
 120
 tgtcttttgc atatggcaac tgagaatgat cttggctacc ttctccagcc cgggagtcgg
 180
 gagttttctg ggggtgggtc acgggtcttg cccggagttc gccctggcaa aggcctgtgc
 240
 cagtgatcct ggagcggagc gaagtgttct cgtgactctg cagccgcagt tcttagggct
 300
 tccttag
 307

<210> 1300

<211> 90

<212> PRT

<213> Homo sapiens

<400> 1300

```

Met Ala Ala Gly Leu Arg Leu Trp Trp Leu Leu Ala Gly Cys Leu Ser
 1             5             10             15
Ser Leu Pro Cys Gly Ser Leu His Arg Ala Ala Ser Cys Val Phe Ala
 20             25             30
Ile Trp Gln Leu Arg Met Ile Leu Ala Thr Phe Ser Ser Pro Gly Val
 35             40             45
Gly Ser Phe Leu Gly Trp Gly His Gly Ser Cys Pro Glu Phe Ala Leu
 50             55             60
Ala Lys Ala Cys Ala Ser Asp Pro Gly Ala Glu Arg Ser Val Ser Val
 65             70             75             80
Thr Leu Gln Pro Gln Phe Leu Gly Leu Pro
      85             90

```

<210> 1301

<211> 408

<212> DNA

<213> Homo sapiens

<400> 1301

```

ctgagcaagt taaaagaagt tcttgaattt tataacttta ttttgacaaa ctattataaa
60
gttgagccta tttcctttga tgcagtatac gctgaaggtt tggaaatggc tgagttcttg
120
cgccctatgg tgtcagatac gattacactt ttgcatgacc ttagaagggtc tggcgcaaac
180
atcatgtttg aaggcgcgca agggctcttg ttggatgttg atcatgtgtac ttaccgtat
240
gtgacttcac ctaatacgac tgcgggcgga gcgccagcgg gaacagggtt ttgctccttg
300
tacttagatt atgtattagg tatcactaag gcttatacga ctgcggttgg ttctggacct
360
ttccctactg agttgtttga cgaagatggt gagcgtcttg gtacgcgt
408

```

<210> 1302

<211> 136

<212> PRT

<213> Homo sapiens

<400> 1302

```

Leu Ser Lys Leu Lys Glu Val Leu Glu Phe Tyr Asn Phe Ile Leu Thr
 1             5             10             15
Asn Tyr Tyr Lys Val Glu Pro Ile Ser Phe Asp Ala Val Tyr Ala Glu
 20             25             30
Gly Leu Glu Met Ala Glu Phe Leu Arg Pro Met Val Ser Asp Thr Ile
 35             40             45
Thr Leu Leu His Asp Leu Arg Arg Ser Gly Ala Asn Ile Met Phe Glu

```

```

      50              55              60
Gly Ala Gln Gly Ser Leu Leu Asp Val Asp His Gly Thr Tyr Pro Tyr
65              70              75              80
Val Thr Ser Ser Asn Thr Thr Ala Gly Gly Ala Pro Ala Gly Thr Gly
      85              90              95
Phe Gly Pro Leu Tyr Leu Asp Tyr Val Leu Gly Ile Thr Lys Ala Tyr
      100              105              110
Thr Thr Arg Val Gly Ser Gly Pro Phe Pro Thr Glu Leu Phe Asp Glu
      115              120              125
Asp Gly Glu Arg Leu Gly Thr Arg
      130              135

<210> 1303
<211> 1037
<212> DNA
<213> Homo sapiens

<400> 1303
gccggggggg ggaatgctatc taacatcttc atgttcaacc cagagaagaa acatcccgcc
60
gtttgccctg gggccctctc atccacatc attttttcaa ccttcccca ncttttcnga
120
aatagggccca accccttaaa aancaaatnt tcanataaac ctttttccct ccaccctttt
180
cccatcccat cttttttccc tcacaaacac aaacaaaang cctcttttct ttgccatttc
240
cactcctttt ggaagaaaca ggcctgttcc cctccctgct caccacttca ccagctcgac
300
ctggcacaaa aatactgccca ccacaccttc accctgccta gcccaacctg gcagggcctc
360
ggagtagcct gccagctaaa atacgggttg ccagataac tgtgaatgtc agataagaat
420
cttctgggac aagtatgtcc catgccatat ttggggacata cttactactaa taaatttctg
480
tttacttgaa actcaaattt gcctgggcgt cctgtacttt tcttaactaa atttggtgcc
540
tctacacaca aggtccctgg ggtggggggg cacaggagca agccccttcc caggctgggt
600
ccctgccggc atctcccaca ggcaggact ggccacccag atggagcccg tgccaggcag
660
cggcgacagc acggacaaaag gctgctcagg agacactgca caccttcctc tttttgtct
720
gggggctcaa gaatccagac gccaccttc ccgagcgagc accaagacag gaagccaacc
780
tgcaatgcc agccactgc gaccacagg ctctgcggg gtctgcggg aaccagggt
840
tcgggtccag aagccaggga taaatgcgc ttctcctata gggacgttca gagttagagag
900
ggggaggcct acagtctcac ctgcagggag aggaagtcct cggggcgggc acgtgggggg
960
cctgacagct ccgagcacac ccggccacag tgaccacgga ctgcacacgc agaagcagtc
1020
tggatcccac gcgtggc
1037

```

<210> 1304

<211> 132

<212> PRT

<213> Homo sapiens

<400> 1304

```

Met Glu Pro Val Pro Gly Ser Arg Arg Gln Thr Asp Lys Gly Cys Ser
 1           5           10           15
Gly Asp Thr Ala His Leu Pro Leu Ser Cys Leu Gly Ala Gln Glu Ser
 20           25           30
Arg Arg Pro Pro Pro Arg Ala Ser Thr Lys Thr Gly Ser Gln Pro Ala
 35           40           45
Met Pro Ser Pro Leu Arg Pro Gln Gly Ser Ala Gly Val Leu Pro Glu
 50           55           60
Pro Arg Val Pro Val Gln Lys Pro Gly Ile Asn Ala Ala Ser Pro Ile
 65           70           75           80
Gly Thr Val Arg Val Glu Arg Gly Arg Pro Thr Val Ser Pro Ala Gly
 85           90           95
Arg Gly Ser Pro Arg Gly Gly His Val Gly Gly Leu Thr Ala Pro Ser
100           105           110
Thr Pro Gly His Ser Asp His Gly Leu His Thr Gln Lys Gln Ser Gly
115           120           125
Ser His Ala Trp
130

```

<210> 1305

<211> 775

<212> DNA

<213> Homo sapiens

<400> 1305

```

naccgcttct gcgagggccat gcgggtctat gccccggcgc cgttgacctc gccacacctc
60
ccggcccccgc tgcgggtgga gagacgtcgg gccctctacg ggtcctggta cgagtttttc
120
ccgcgctctc aggtgctcta tgtcgatcgc gacggtcact gggtttcagg tactttcgac
180
acctcctggg agcgcctgga gcgcccgct cgcgatggat ttgacgttgt ttacctgccc
240
gcgatccatc ccatgggccca agccttcgc aagggaagg acaaacacct gaccccagg
300
ccggacgac cgggatcgcc gtgggccatc ggatcgtctg atggcgccca tgacaccatt
360
caccocgacc taggcacctt cgacgacctc gaccgtttcg tggcccaacc tcatgacctc
420
ggcattggagg tggccctaga ttttgccttg caagcctcac cagaccaccc gtgggtacac
480
cagcaccocgg agtggttcac gaccgcggt gatggcacca tcgcctatgc agaaaattca
540
cccaaaaagt atcaggacat ctaccgatc aacttcgaca atgacctga cggtatctac
600
caggaatgct tgcggctgct ggagttatgg atctccacg cgtgacgat ttcccgctc
660

```

gataatccac ataccaagcc tctgaatttc tgggcctggc toatggaaca ggttcacgt
 720
 cgtcaccocg aggtcatctt cctggcagag gccttcaccc gtcccgagat gatca
 775

<210> 1306

<211> 258

<212> PRT

<213> Homo sapiens

<400> 1306

Xaa	Ala	Phe	Cys	Glu	Ala	Met	Arg	Val	Tyr	Ala	Pro	Arg	Pro	Leu	Thr
1			5						10					15	
Ser	Pro	Thr	Leu	Pro	Ala	Pro	Leu	Arg	Val	Glu	Arg	Arg	Ala	Leu	
		20					25					30			
Tyr	Gly	Ser	Trp	Tyr	Glu	Phe	Phe	Pro	Arg	Ser	Gln	Gly	Ala	Tyr	Val
	35					40					45				
Asp	Ala	Asp	Gly	His	Trp	Val	Ser	Gly	Thr	Phe	Asp	Thr	Ser	Trp	Glu
	50				55					60					
Arg	Leu	Asp	Ala	Ala	Ala	Ala	Met	Gly	Phe	Asp	Val	Val	Tyr	Leu	Pro
65			70						75					80	
Ala	Ile	His	Pro	Met	Gly	Gln	Ala	Phe	Arg	Lys	Gly	Lys	Asp	Asn	Thr
			85					90					95		
Leu	Thr	Pro	Gly	Pro	Asp	Asp	Pro	Gly	Ser	Pro	Trp	Ala	Ile	Gly	Ser
		100					105					110			
Ser	Asp	Gly	Gly	His	Asp	Thr	Ile	His	Pro	Asp	Leu	Gly	Thr	Phe	Asp
	115				120						125				
Asp	Leu	Asp	Arg	Phe	Val	Ala	His	Ala	His	Asp	Leu	Gly	Met	Glu	Val
	130				135					140					
Ala	Leu	Asp	Phe	Ala	Leu	Gln	Ala	Ser	Pro	Asp	His	Pro	Trp	Val	His
145			150						155					160	
Gln	His	Pro	Glu	Trp	Phe	Thr	Thr	Arg	Val	Asp	Gly	Thr	Ile	Ala	Tyr
			165					170					175		
Ala	Glu	Asn	Ser	Pro	Lys	Lys	Tyr	Gln	Asp	Ile	Tyr	Pro	Ile	Asn	Phe
		180					185					190			
Asp	Asn	Asp	Pro	Asp	Gly	Ile	Tyr	Gln	Glu	Cys	Leu	Arg	Leu	Leu	Glu
	195				200					205					
Leu	Trp	Ile	Ser	His	Gly	Val	Thr	Ile	Phe	Arg	Val	Asp	Asn	Pro	His
	210				215					220					
Thr	Lys	Pro	Leu	Asn	Phe	Trp	Ala	Trp	Leu	Met	Glu	Gln	Val	His	Arg
225			230					235					240		
Arg	His	Pro	Glu	Val	Ile	Phe	Leu	Ala	Glu	Ala	Phe	Thr	Arg	Pro	Glu
			245					250					255		

Met Ile

<210> 1307

<211> 624

<212> DNA

<213> Homo sapiens

<400> 1307

cggccgggtgg ggagtgccaa gccccaggct cctgcaccc cacttctggt gaggtcagtg
 60

atgtctgggca catgcgggtca gggccctgtg cctgagccgt ggaactccac agccattcca
 120
 catgttcagt cccacaccct gaggccaaag caccgccagt ccctgaggga gcaagggccct
 180
 gccaccccgag gctgcgctg cagaggcaaa cagccccgag caaggcccg gcaacccagg
 240
 ctgtggctgc atggggcaaa cacagcctgg cctgaggctg cgggcccagtc ggggtggcca
 300
 taggctaagc agaagccagg gcctccctcc ccactgggct ttccacaaaa acctgactaa
 360
 tgtccaggga cagccaaagg ccttgaggtc agctgggtgg aacaccttc cctaccatc
 420
 ccgagatatt gtcttcttgg atggagtttt caaagccctc catgtggagg tctcgggatg
 480
 agaggcctcg gctgagctct gtgcagagga gcaggaagct gcagaatggg caccgcctc
 540
 cctccagca cctccagtc ctgccacgcc ccaagctcct gagctgctct gcccaagacc
 600
 tcccccaacc ttggtctgac gcgt
 624

<210> 1308

<211> 100

<212> FRT

<213> Homo sapiens

<400> 1308

Met	Ala	Thr	Pro	Thr	Gly	Arg	Gln	Pro	Gln	Ala	Arg	Leu	Cys	Leu	Pro
1				5					10				15		
His	Ala	Ala	Thr	Ala	Trp	Gly	Cys	Arg	Ala	Leu	Leu	Gly	Ala	Val	Cys
			20				25					30			
Leu	Cys	Ser	Gly	Ser	Leu	Gly	Trp	Gln	Gly	Leu	Ala	Pro	Ser	Gly	Thr
			35				40					45			
Arg	Gly	Ala	Leu	Ala	Ser	Gly	Cys	Gly	Thr	Glu	His	Val	Glu	Trp	Leu
			50			55				60					
Trp	Ser	Ser	Thr	Ala	Gln	Ala	Gln	Gly	Pro	Asp	Arg	Met	Cys	Pro	Ala
65				70					75					80	
Ser	Leu	Thr	Ser	Pro	Glu	Val	Gly	Cys	Arg	Glu	Pro	Gly	Ala	Trp	His
				85					90					95	
Ser	Pro	Pro	Ala												
			100												

<210> 1309

<211> 563

<212> DNA

<213> Homo sapiens

<400> 1309

ntgatcatcg ccaaccacca gtccaactat gacctgttcg tgtttggcac gggagtgcgc
 60
 taccgtactg tgtgtatcgg caaaaagagc ctgaaatggg tgccgctggt cggtcagttg
 120
 ttctggctgg cgggcaatgt gttgattgac cggggcaacg cgcacaaggc gcgcgcgtca
 180

atgctcacca ccacccacac cttgcagcat aaagacacat cgatctgggt atttccgaa
 240
 ggtagacgca atttcgggtga aaccttgctg cogttcaaga aaggtgcgtt ccagatggcg
 300
 attgccgcag gtgtgccgat cgtgcaggtg tgtgtcagca cgtatgtgaa gcacatgaag
 360
 ctcaatcggt gggacagtgg cgatatattta attcgtcgtg tgccgccaat tcctacgacc
 420
 ggactgacgt tggatgacat gccacggttg atggagacct gccgtcaaca aatgcgcgag
 480
 tgcattgagg caatggaccg cgagctggaa atcgtccctt gtaggaacga attggctcgc
 540
 gaagggcggt aacgactacg cgt
 563

<210> 1310

<211> 183

<212> PRT

<213> Homo sapiens

<400> 1310

Xaa Ile Ile Ala Asn His Gln Ser Asn Tyr Asp Leu Phe Val Phe Gly
 1 5 10 15
 Thr Gly Val Pro Tyr Arg Thr Val Cys Ile Gly Lys Lys Ser Leu Lys
 20 25 30
 Trp Val Pro Leu Phe Gly Gln Leu Phe Trp Leu Ala Gly Asn Val Leu
 35 40 45
 Ile Asp Arg Gly Asn Ala His Lys Ala Arg Arg Ser Met Leu Thr Thr
 50 55 60
 Thr His Thr Leu Gln His Lys Asp Thr Ser Ile Tip Val Phe Ala Glu
 65 70 75 80
 Gly Thr Arg Asn Phe Gly Glu Thr Leu Leu Pro Phe Lys Lys Gly Ala
 85 90 95
 Phe Gln Met Ala Ile Ala Ala Gly Val Pro Ile Val Gln Val Cys Val
 100 105 110
 Ser Thr Tyr Val Lys His Met Lys Leu Asn Arg Trp Asp Ser Gly Asp
 115 120 125
 Ile Leu Ile Arg Ser Leu Pro Pro Ile Pro Thr Thr Gly Leu Thr Leu
 130 135 140
 Asp Asp Met Pro Arg Leu Met Glu Thr Cys Arg Gln Gln Met Arg Glu
 145 150 155 160
 Cys Ile Glu Ala Met Asp Arg Glu Leu Glu Ile Val Pro Cys Arg Asn
 165 170 175
 Glu Leu Ala Arg Glu Gly Arg
 180

<210> 1311

<211> 674

<212> DNA

<213> Homo sapiens

<400> 1311

gagcttgacg acgccaacg tgacatcctt gtagcaggcg ggtacttgac caatgatccc
 60

tccaggggccg acccggcaca caccgtcggg ctgacggatg atctgagctg ggtcaagcgc
 120
 atctcccgccg cgcgaaagc cggaaatcca cggggcgctg gatcggcgat tctgttcaca
 180
 gggctgaccc ccgatcagga tcgactgacc aacgagtggg cgcaggcgca cgggttgggg
 240
 gaattttatg tcatggcccc ccgaatccct ggtgatgtcc cgctgccaac gatcaccatc
 300
 gtccgcagccg tcaccttcat cgtgttgctg gccatcatgg cgggcctggt ggccagaggag
 360
 gagagagccg ccaacagtga tctggtgacc agcctcaaac gcacgggatt gggcaggcgt
 420
 tgggtggacc aggtcatcct tgtggagggt gctaccacaa tgctggcgcc cctgatatgc
 480
 ggggtgatct cctcggttgt cgcggtgtgg ctcacaggca ggatcctgtc gggagccttg
 540
 gacctgcttg gggccgcgtg gtgggtcttc ggtgcgttgg ccgccgggat gttcggtgga
 600
 tccttctgtg gggccgccat ccacgcgctg taccacttcg acatgagagc tacctgatcc
 660
 acgaccccggt gaca
 674

<210> 1312

<211> 196

<212> PRT

<213> Homo sapiens

<400> 1312

Met Asp Gly Gly Pro Gln Gln Gly Ser Thr Glu His Pro Gly Gly Gln
 1 5 10 15
 Arg Thr Glu Asp Pro Pro Arg Gly Pro Lys Gln Val Gln Gly Ser Arg
 20 25 30
 Gln Asp Pro Ala Cys Glu Pro His Arg Asp Asn Arg Gly Asp His Pro
 35 40 45
 Ala Tyr Gln Gly Gly Gln His Cys Gly Ser His Leu His Lys Asp Asp
 50 55 60
 Leu Val His Pro Thr Pro Ala Gln Ser Asp Ala Phe Glu Ala Gly His
 65 70 75 80
 Gln Ile Thr Val Gly Gly Ser Leu Leu Leu Arg Gln Gln Ala Arg His
 85 90 95
 Asp Gly Arg Gln His Asp Glu Gly Asp Gly Arg Asp Asp Gly Asp Arg
 100 105 110
 Trp Gln Arg Asp Ile Thr Glu Asp Ser Gly Gly His Asp Ile Lys Phe
 115 120 125
 Pro Gln Pro Val Arg Leu Arg Pro Leu Val Gly Gln Ser Ile Leu Ile
 130 135 140
 Gly Gly Gln Pro Cys Glu Gln Asn Arg Arg Ser Ser Ala Ser Trp Tyr
 145 150 155 160
 Ser Gly Phe Arg Arg Pro Gly Asp Ala Leu Asp Pro Ala Gln Ile Ile
 165 170 175
 Arg Gln Pro Asp Gly Val Cys Arg Val Gly Pro Gly Gly Ile Ile Gly
 180 185 190
 Gln Val Pro Ala

195

<210> 1313
 <211> 367
 <212> DNA
 <213> Homo sapiens

<400> 1313
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<212> PRT

<213> Homo sapiens

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Arg Cys Gly Ser Arg Asn Gly Glu Lys Asp Trp Glu Asn Ala Ser Thr		685
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          770          775          780
Glu Thr Glu Glu Ile Asn Lys Leu Thr Gly Ile Gly Pro Lys Ser Ile
          785          790          795
Thr Lys Lys Met Ile Glu Gly Leu Tyr Lys Tyr Asn Ser Asp Arg Lys
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Gln Phe Ser His Ile Pro Ala Lys Thr Leu Ser Ala Ser Val Asp Ala
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<211> 1123

<212> DNA

<213> Homo sapiens

<400> 1317

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<213> Homo sapiens

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<211> 538

<212> DNA

<213> Homo sapiens

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<211> 169

<212> PRT

<213> Homo sapiens

<400> 1320

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<212> DNA

<213> Homo sapiens

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 gctctcgaaa tccatttgca acccgaggaa tgggtggcat tctccctgca cttcatcaat
 660
 cagcgggtgg acagtagaga cgtttcgcgg accatgtcga tgactcagac gatctgcgac
 720
 gttttcaccg agctggagga cctgtggcac gttgagatcg accgttcgtc catgagcgca
 780
 tcccgcttcg tcacccacct tgcctatctg ttcgctcggg cctcggacaa caagcagctc
 840
 tctcagcttg acctggacat tgtgggactc atgtcagatc gctaccgaca agccacattg
 900
 gcagctagcc aagtggccga gcacatateg aaagcaatcg gcaacgacct gacggaagcc
 960
 gaaatcaact acatcgctt acacaccacc cggctctaca acgagggtgat ggggatggat
 1020
 gactgacgat cgcgcacctg ttaaggctca tcggttagtg gcaatacaca aaatggcgat
 1080
 gaccttctct cgggaaagcc agcaccaaaag tccccagat caaaattcag atcgctgcct
 1140
 aattcccacc ccgacatcca agaggtcagg ggggggttgt tgggggtgtt ggggtggggg
 1200
 ggggggggtt gcatgctcag ggggtggggc tttgttgaag ccatacatgaa gttgcaaac
 1260
 caggactgtt ccactagtaa agccctgcc tt
 1292

<210> 1322

<211> 317

<212> PRT

<213> Homo sapiens

<400> 1322

```

Met Ile Arg Arg Gln Cys Ser Gln Ser Pro Gln Asp Asp Pro Val Gln
 1           5           10           15
Arg Pro Asp Arg Ser Arg Tyr Ala Thr Thr Lys Gln Gly Ser Leu Arg
      20           25           30
Pro Gly His Val Ile Val Lys Lys Ile Tyr Asn Asn Asn Val Leu Leu
 35           40           45
Gly Val Asn Gly Ser Gly Thr Glu Met Val Val Asn Ala Arg Gly Ile
 50           55           60
Ala Tyr Gly Arg His Arg Gly Glu Ile Val Asp Ala Ser Ser Ala Gln
 65           70           75           80
Arg Tyr Val Ala Glu Gly Ala Tyr Arg Thr Thr Ala Ile Ala Ser Leu
      85           90           95
Leu Thr Asn Ala Thr His Thr Glu Val Arg Val Ala Gln Ala Ile Val
 100          105          110
Glu Leu Ala Arg Glu Glu Leu Gly Thr Pro His Ala Arg Arg Met Met
 115          120          125
Leu Pro Ile Leu Asp His Leu Val Ala Ala Val His Arg Ala Lys Gln
 130          135          140
Gly Ala Val Ile Asp Phe Pro Leu Glu Trp Glu Val Arg Gln Leu Tyr
 145          150          155          160
Pro Asp Glu Ala Glu Leu Gly Arg Arg Ala Val Glu Ile Val Asp Gly
      165          170          175
Ala Leu Glu Ile His Leu Gln Pro Glu Glu Trp Val Ala Phe Ser Leu
 180          185          190
His Phe Ile Asn Gln Arg Trp Asp Ser Arg Asp Val Ser Arg Thr Met
 195          200          205
Ser Met Thr Gln Thr Ile Cys Asp Val Phe Thr Glu Leu Glu Asp Leu
 210          215          220
Trp His Val Glu Ile Asp Arg Ser Ser Met Ser Ala Ser Arg Phe Val
 225          230          235          240
Thr His Leu Arg Tyr Leu Phe Ala Arg Ala Ser Asp Asn Lys Gln Leu
      245          250          255
Ser His Val Asp Leu Asp Ile Val Gly Leu Met Ser Asp Arg Tyr Pro
 260          265          270
Glu Ala Thr Leu Ala Ala Ser Gln Val Ala Glu His Ile Ser Lys Ala
 275          280          285
Ile Gly Asn Asp Leu Thr Glu Ala Glu Ile Asn Tyr Ile Ala Leu His
 290          295          300
Thr Thr Arg Leu Tyr Asn Glu Val Met Gly Met Asp Asp
 305          310          315

```

<210> 1323

<211> 306

<212> DNA

<213> Homo sapiens

<400> 1323

```

cgcgtagatgg gaatgcgtca ctatgatgtt cagttgattg gtgggtatcac tctgcacgaa
 60
ggcaaaaattg ctgagatgag tacaggtgaa ggtaaaaccc tgaatgggtac ttttagcgtgt
 120

```

tacctcaatg cattgagtg tgagggtgtg catgtcatca ccgtcaatga ctatcttgca
 180
 caacgtgatg ctgaactcaa cgcgccatta tttagagtttt tgggtttaag catcggtgtg
 240
 atttattcga tgcaaatgcc tgctgagaaa gcacaagctt atttagcaga cattacttac
 300
 ggtacc
 306

<210> 1324

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1324

Arg	Val	Met	Gly	Met	Arg	His	Tyr	Asp	Val	Gln	Leu	Ile	Gly	Gly	Ile
1				5					10					15	
Thr	Leu	His	Glu	Gly	Lys	Ile	Ala	Glu	Met	Arg	Thr	Gly	Glu	Gly	Lys
			20					25					30		
Thr	Leu	Met	Gly	Thr	Leu	Ala	Cys	Tyr	Leu	Asn	Ala	Leu	Ser	Gly	Gln
		35					40					45			
Gly	Val	His	Val	Ile	Thr	Val	Asn	Asp	Tyr	Leu	Ala	Gln	Arg	Asp	Ala
	50					55				60					
Glu	Leu	Asn	Arg	Pro	Leu	Phe	Glu	Phe	Leu	Gly	Leu	Ser	Ile	Gly	Val
	65				70				75				80		
Ile	Tyr	Ser	Met	Gln	Met	Pro	Ala	Glu	Lys	Ala	Gln	Ala	Tyr	Leu	Ala
			85					90					95		
Asp	Ile	Thr	Tyr	Gly	Thr										
			100												

<210> 1325

<211> 391

<212> DNA

<213> Homo sapiens

<400> 1325

gtgcacatgg gcccaactggc gaatccgacg cgcggcctac ggccgcgaat actggcgggc
 60
 attgtcgccg catgtttcgt ctccgctcat gccggaagct ggccagagaa accgatcagc
 120
 atgggtcgctgc cggtttccgc cggaggcggc accgatctcg tggcgcgctc gatccagcgc
 180
 cttttgcagc gcgaactcgc acaaccgggt gtgatcgaca accgcagcgg cgcaggcggc
 240
 acgctcggct ccagcttcgt ggccggggcc gttgccgacg gctacacggc tggcgtggtc
 300
 accacagaca cccacgcggt aagcgtcgcg ctctatcccc ggctggccta caaccgcaca
 360
 gcggactttg catacgccgg cttcatcgcc n
 391

<210> 1326

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1326

```

Val His Met Gly Pro Leu Ala Asn Pro Thr Arg Gly Leu Arg Arg Ala
 1             5             10             15
Ile Leu Ala Ala Ile Val Ala Ala Cys Ser Val Ser Ala His Ala Gly
      20             25             30
Ser Trp Pro Glu Lys Pro Ile Thr Met Val Val Pro Phe Pro Ala Gly
      35             40             45
Gly Gly Thr Asp Leu Val Ala Arg Ser Ile Gln Pro Leu Leu Gln Arg
      50             55             60
Glu Leu Gly Gln Pro Val Val Ile Asp Asn Arg Ser Gly Ala Gly Gly
      65             70             75             80
Thr Leu Gly Ser Ser Phe Val Ala Arg Ala Val Ala Asp Gly Tyr Thr
      85             90             95
Ala Gly Val Val Thr Thr Ser Thr His Ala Val Ser Val Ala Leu Tyr
      100             105             110
Pro Arg Leu Ala Tyr Asn Pro Thr Ala Asp Phe Ala Tyr Ala Gly Phe
      115             120             125
Ile Gly
      130

```

<210> 1327

<211> 324

<212> DNA

<213> Homo sapiens

<400> 1327

```

nnacgcgtga ttccggaact gcagcagttc gagcagtcgc atggacagag cgacgggagc
60
tactggctat gggttcgagct gctgtggcga gactatttcc gctttctgca tcttcggcat
120
ggcgctcggc tgtaccgcgc acgcggcctc gcaaatgagg tacggcacgc ggagcgccca
180
gatgtgcagg gcttcgagcg ctggcgctgt gcatcgaccg gcgagccgct cgctgatgcc
240
gcgatgcgcg agctggagac caccggctac ctcagcaaca ggctcagaca ggtggtcgcg
300
agctacctcg tgcagagct ggga
324

```

<210> 1328

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1328

```

Xaa Arg Val Ile Ser Glu Leu Gln Gln Phe Glu Gln Ser His Gly Gln
 1             5             10             15
Ser Asp Gly Ser Tyr Trp Leu Trp Phe Glu Leu Leu Trp Arg Asp Tyr
      20             25             30
Phe Arg Phe Leu His Leu Arg His Gly Ala Arg Leu Tyr Arg Ala Arg
      35             40             45
Gly Leu Ala Asn Glu Val Arg His Ala Glu Arg Pro Asp Val Gln Gly

```

```

      50              55              60
Phe Glu Arg Trp Arg Arg Ala Ser Thr Gly Glu Pro Leu Val Asp Ala
65              70              75              80
Ala Met Arg Glu Leu Glu Thr Thr Gly Tyr Leu Ser Asn Arg Leu Arg
      85              90              95
Gln Val Val Ala Ser Tyr Leu Val His Glu Leu Gly
      100              105

```

<210> 1329

<211> 438

<212> DNA

<213> Homo sapiens

<400> 1329

```

ngtgcacgct tagcattaga tttagcttcc agtggcaaaa ctacgtcggt gatttcaagc
60
ggcgatatcg gcatttaacgc gatggcgacc ctgggtgttg aactgctgga tagacaactc
120
cagggccttg aagaccatcc tgaatggta gatgttgaaa tcgatgtggt acctggcatc
180
tctgcaatgc aagctgggtgc aagtcgtatt ggtgcgatgt taggtcatga cttttgtacg
240
gtgagttttg ctgatttatt aaccctctgg gaaactatta ataaacgtat tcatagtgc
300
gggtgaggggg attttgttat ctctttttat aaccctgttt ctaagaaacg tgattggcag
360
cttaaccacg cgcgtgatgt attattgaaa taccgtccag catcaacgcg agttttatta
420
ggtcgtcagt tgacgcgt
438

```

<210> 1330

<211> 146

<212> PRT

<213> Homo sapiens

<400> 1330

```

Xaa Ala Arg Leu Ala Leu Asp Leu Ala Ser Ser Gly Lys Thr Thr Ser
1              5              10              15
Leu Ile Ser Ser Gly Asp Ile Gly Ile Tyr Ala Met Ala Thr Leu Val
      20              25              30
Phe Glu Leu Leu Asp Arg Gln Leu Gln Gly Leu Glu Asp His Pro Glu
      35              40              45
Trp Leu Asp Val Glu Ile Asp Val Val Pro Gly Ile Ser Ala Met Gln
      50              55              60
Ala Gly Ala Ser Arg Ile Gly Ala Met Leu Gly His Asp Phe Cys Thr
65              70              75              80
Val Ser Leu Ser Asp Leu Leu Thr Pro Trp Glu Thr Ile Asn Lys Arg
      85              90              95
Ile His Ser Ala Gly Glu Gly Asp Phe Val Ile Ser Phe Tyr Asn Pro
      100              105              110
Val Ser Lys Lys Arg Asp Trp Gln Leu Asn His Ala Arg Asp Val Leu
      115              120              125
Leu Lys Tyr Arg Pro Ala Ser Thr Pro Val Leu Leu Gly Arg Gln Leu

```

130 135 140
Thr Arg
145

<210> 1331
<211> 453
<212> DNA
<213> Homo sapiens

<400> 1331
gcgtaccgct ccgcggaact ggtgatgatg accgaggcac cgggatgcgg aatccccctgg
60
catctttctgg ccggcatcgg acgcatcgaa tccggtcacg ccaacggcgg caagacgacc
120
tcggtgggta cgaacgtcac cccgatcctc ggccccatcc tcgacgggacg gctggcgaggc
180
aacgaagtca ttccgggacac cgacaagggc aatcgacggc gacccactca cgaccgcggc
240
gtcggggccga tgcagttcat tccggccacc tgggccggat atgccacgca cggaacgggg
300
gacgggaatca aggaccccaa caacgtcttc gatcgggcac tctcggcagc gaagtacctc
360
tgcagcggcg gactcaacct gcgcgatgtc gcccaggaga ccaaagctgt tctcgcatac
420
aacaactcgg ccgcttacgc agcaaacgtg atc
453

<210> 1332
<211> 151
<212> PRT
<213> Homo sapiens

<400> 1332
Ala Tyr Arg Ser Ala Glu Leu Val Met Met Thr Glu Ala Pro Gly Cys
1 5 10 15
Gly Ile Pro Trp His Leu Leu Ala Gly Ile Gly Arg Ile Glu Ser Gly
20 25 30
His Ala Asn Gly Gly Lys Thr Thr Ser Val Gly Thr Asn Val Thr Pro
35 40 45
Ile Leu Gly Pro Ile Leu Asp Gly Arg Leu Ala Gly Asn Glu Val Ile
50 55 60
Arg Asp Thr Asp Lys Gly Asn Arg Arg Arg Pro Thr His Asp Arg Ala
65 70 75 80
Val Gly Pro Met Gln Phe Ile Pro Ala Thr Trp Ala Gly Tyr Ala Ser
85 90 95
Asp Gly Asn Gly Asp Gly Ile Lys Asp Pro Asn Asn Val Phe Asp Ala
100 105 110
Ala Leu Ser Ala Ala Lys Tyr Leu Cys Ser Gly Gly Leu Asn Leu Arg
115 120 125
Asp Val Ala Gln Glu Thr Lys Ala Val Leu Arg Tyr Asn Asn Ser Ala
130 135 140
Ala Tyr Ala Ala Asn Val Ile
145 150

<210> 1333
 <211> 540
 <212> DNA
 <213> Homo sapiens

<400> 1333
 acgcgtcgcc cacactgttg ccgcgagggc ggctcgagcc ggggtgtagg aaggatccgc
 60
 ggccacagctc gtcgggtcaag atgggtctag tgctgctcgt atggcgggcg aggcacccgc
 120
 gcgaaggagg aaagcggatg gactaagcca gcttgctatc gatgtcaatg gagacgcggt
 180
 cagcgtcgcc acggaaatca ccgggcctac tcgtctatta gcccttattg gactaaccga
 240
 agtacacggt cgggcgagcg aaatgtgtat ttgctggct cgtcgaggcc gttgcagcga
 300
 tacaatgatg aggtgtctaa gtattttccg gtccaccggc agaaccgcga gcagcgttct
 360
 ctcaactcaga tcgtcgacat cctgcacatc ggcggtctta tcgcctaccc gacagacagc
 420
 ggttatgcct tcggtgcccc gntagggaaat aaggatgccg tggaccggat tcgcaaaatt
 480
 cgccagttat ttgacaagca tcacttcacc ctggctcatga gccagtttgc gcaggttggc
 540

<210> 1334
 <211> 70
 <212> PRT
 <213> Homo sapiens

<400> 1334
 Val His Pro Glu Asn Pro Gln Gln Arg Ser Leu Asn Gln Ile Val Asp
 1 5 10 15
 Ile Leu His His Gly Gly Leu Ile Ala Tyr Pro Thr Asp Thr Gly Tyr
 20 25 30
 Ala Phe Gly Ala Arg Xaa Gly Asn Lys Asp Ala Val Asp Arg Ile Arg
 35 40 45
 Lys Leu Arg Gln Leu Phe Asp Lys His His Phe Thr Leu Val Met Ser
 50 55 60
 Gln Phe Ala Gln Val Gly
 65 70

<210> 1335
 <211> 748
 <212> DNA
 <213> Homo sapiens

<400> 1335
 nctctcatatc tttttttccc tattcctatc cccctctctc ccgaccgcgt gaagcgttct
 60
 gtgaatgccca agaagaagcg tcgtgaggtc ctgatcagg cctccggtta ccgtggcag
 120
 cgctcgccgc tgtaccgcaa ggccaaggag cagaccctcc attcgccac ttattcgttc
 180

cgtgaccgtc gtgctaagaa gggtgacttc cgctcgctgt ggatccagcg catcaatgct
 240
 gcttcccgtg cccagggcat gacctacaac cgtttcatca acggtctgaa gaacgctggc
 300
 gtcgaggtcg accgcaagat gctcgtgtag cttgccgtct ccgacattaa cgccttcaac
 360
 agcctgtgtc aggtcgctaa ggctagccag ccgcagaacg ctgctgcctg agatggccat
 420
 gactggcggg ccgaacgacg actatttggg atgggacgac atctcgaagg ggtcattgcg
 480
 ttcggcccggt cgtctttcat ctccggcgcg acgcgatgag tccgggctgt tcttggtaga
 540
 aggtgcgcag gcagttcgtg aagccctagc atggccgggt aaagtcattt tgttggaac
 600
 ctccgaccca gctcgcgatg ctgagcatgt cgaggtggct acatgtcgtg cgttcgggt
 660
 cgtggtgctc actgacgagg atgtcaatgc gctttctgat accgtacca gtcaggggat
 720
 cttcgcggta tgtcggcagg ttacgcgt
 748

<210> 1336

<211> 136

<212> PRT

<213> Homo sapiens

<400> 1336

Xaa	Leu	Ile	Leu	Phe	Phe	Pro	Ile	Pro	Ile	Pro	Pro	Leu	Ser	Asp	Arg
1				5					10					15	
Val	Lys	Arg	Ser	Val	Asn	Ala	Lys	Lys	Arg	Arg	Glu	Val	Leu	Asp	
			20					25					30		
Gln	Ala	Ser	Gly	Tyr	Arg	Gly	Gln	Arg	Ser	Arg	Leu	Tyr	Arg	Lys	Ala
			35				40				45				
Lys	Glu	Gln	Thr	Leu	His	Ser	Ala	Thr	Tyr	Ser	Phe	Arg	Asp	Arg	Arg
			50			55				60					
Ala	Lys	Lys	Gly	Asp	Phe	Arg	Ser	Leu	Trp	Ile	Gln	Arg	Ile	Asn	Ala
						70				75				80	
Ala	Ser	Arg	Ala	Gln	Gly	Met	Thr	Tyr	Asn	Arg	Phe	Ile	Asn	Gly	Leu
					85				90				95		
Lys	Asn	Ala	Gly	Val	Glu	Val	Asp	Arg	Lys	Met	Leu	Ala	Glu	Leu	Ala
			100					105					110		
Val	Ser	Asp	Ile	Asn	Ala	Phe	Asn	Ser	Leu	Val	Glu	Val	Ala	Lys	Ala
			115				120					125			
Ser	Gln	Pro	Gln	Asn	Ala	Ala									
			130				135								

<210> 1337

<211> 364

<212> DNA

<213> Homo sapiens

<400> 1337

acgcgtgagg ccaggccact gggcaccgcc gttagccagg gcagccctct tcagtggtca
 60

aggcagactc agctcatggg cgagcatgtc agtgaagggc acagcaaggc tcacgagtgg
 120
 gccctcttgc tcattggtcag tgtgggtcag tgccttcgct gtatgagact acagggtttc
 180
 tctgcctcac catgggggac gattgggtct gggtcacttc ctgctgtggg acctgtcctg
 240
 ggcactgcag gatgtggggc agggctccta cgtgccagct accagatgcc agcagcaccc
 300
 ccagaagtga caaccacaac catctccagg tgttgccagt gtcccctggg ggtcagagtg
 360
 gcc
 364

<210> 1338

<211> 96

<212> PRT

<213> Homo sapiens

<400> 1338

Met	Gly	Glu	His	Val	Ser	Glu	Gly	His	Ser	Lys	Ala	His	Glu	Trp	Ala
1				5					10				15		
Ser	Cys	Leu	Met	Val	Ser	Val	Gly	Gln	Cys	Phe	Arg	Cys	Met	Arg	Leu
		20					25					30			
Gln	Gly	Phe	Ser	Ala	Ser	Pro	Trp	Gly	Thr	Ile	Gly	Ser	Gly	Ser	Leu
		35					40				45				
Pro	Ala	Val	Gly	Pro	Val	Leu	Gly	Thr	Ala	Gly	Cys	Gly	Ala	Gly	Leu
		50				55				60					
Leu	Arg	Ala	Ser	Tyr	Gln	Met	Pro	Ala	Ala	Pro	Glu	Val	Thr	Thr	
65					70				75				80		
Thr	Thr	Ile	Ser	Arg	Cys	Cys	Gln	Cys	Pro	Leu	Gly	Val	Arg	Val	Ala
			85						90				95		

<210> 1339

<211> 653

<212> DNA

<213> Homo sapiens

<400> 1339

cgctgtgtct tcaacatcga cgaaaagcag tgcattgacc tggcgaccg tggtagctag
 60
 tgggtcgtca ggtacgcga caagtacctc ggcgacgttg agtctggcta cgagtactct
 120
 ccgagagtgt tttagccagac ccgcacggac ttcgctatcg acgtctgtca ctccgtgagt
 180
 gacgtgtggc agccggggcc aggcctgtgag attatcctta atctgccggc taccgtcgag
 240
 atgagtactc cgaacaccta cgcgcaccaa atcagagtact tctgccgcaa tatccgtgat
 300
 cgtgagcacg tgtgcgtctc ttgcacccg cacaatgata gtggcacggc gatcgcgcc
 360
 gccgagttcg cgcagatggc gggcgccgat cgcgtcgagg gctgtttctt tggccccggc
 420
 gagcgccccg gcaccgtcga cctggtcacc ctgggcatga acctcgtcag ccaggaggtt
 480

gagccgggta togacttctc cgacatgccc aagatccgcc gcaccgtcga gtactgcacc
 540
 tgcttgccag taccggcccg ccagccctac tccggcgatc tggctttcac cgcctttctc
 600
 gggtccacc aggacgcat caagaagggt ctggaagacc tggcccggcg cgc
 653

<210> 1340

<211> 217

<212> PRT

<213> Homo sapiens

<400> 1340

Arg	Val	Val	Phe	Asn	Ile	Asp	Glu	Lys	Gln	Cys	Ile	Asp	Leu	Ala	His
1				5					10					15	
Arg	Gly	Thr	Glu	Trp	Val	Val	Arg	Tyr	Ala	Asp	Lys	Tyr	Leu	Gly	Asp
			20					25					30		
Val	Glu	Phe	Gly	Tyr	Glu	Tyr	Ser	Pro	Glu	Met	Phe	Ser	Gln	Thr	Arg
			35				40					45			
Thr	Asp	Phe	Ala	Ile	Asp	Val	Cys	His	Ser	Val	Met	Asp	Val	Trp	Gln
			50				55				60				
Pro	Gly	Pro	Gly	Arg	Glu	Ile	Ile	Leu	Asn	Leu	Pro	Ala	Thr	Val	Glu
65				70				75						80	
Met	Ser	Thr	Pro	Asn	Thr	Tyr	Ala	Asp	Gln	Ile	Glu	Tyr	Phe	Cys	Arg
				85				90						95	
Asn	Ile	Arg	Asp	Arg	Glu	His	Val	Cys	Val	Ser	Leu	His	Pro	His	Asn
			100					105					110		
Asp	Arg	Gly	Thr	Ala	Ile	Ala	Ala	Ala	Glu	Phe	Ala	Gln	Met	Ala	Gly
			115				120					125			
Ala	Asp	Arg	Val	Glu	Gly	Cys	Phe	Phe	Gly	Pro	Gly	Glu	Arg	Pro	Gly
130					135						140				
Thr	Val	Asp	Leu	Val	Thr	Leu	Gly	Met	Asn	Leu	Val	Ser	Gln	Gly	Val
145					150					155				160	
Asp	Ala	Gly	Ile	Asp	Phe	Ser	Asp	Met	Pro	Lys	Ile	Arg	Arg	Thr	Val
				165					170					175	
Glu	Tyr	Cys	Thr	Cys	Leu	Pro	Val	Pro	Ala	Arg	Gln	Pro	Tyr	Ser	Gly
			180					185					190		
Asp	Leu	Val	Phe	Thr	Ala	Phe	Ser	Gly	Ser	His	Gln	Asp	Ala	Ile	Lys
			195				200					205			
Lys	Gly	Leu	Glu	Asp	Leu	Ala	Arg	Arg							
	210						215								

<210> 1341

<211> 666

<212> DNA

<213> Homo sapiens

<400> 1341

accggttgct gatttccttg ttggagtctt caccactatg agcagtgtact ccattgtttt
 60
 gcaaaagtttc ttgccttget ttgatcatat ttccacaact ggattcccaa cagaagtgtg
 120
 gcaatctgta atagaaaagt tggcaaaaga aggattatgg catttcatttc tgcttctgtc
 180

agcaaaaaaa gaccgattac caagaaatat tcatgtccca gagttatcac tgaaaagtct
 240
 ctttgagaaa tacgttttca ttggacttta tgagaagatg gaacaagtgc ccaagttagt
 300
 ccagtggctc atctccattg gtgcaagtgt tgagactata ggaccgtatc ccccttcatgc
 360
 cctcatgcga ctctgtatcc aagccagaga aaaccatctt ttccgggtgg taatggatca
 420
 caagcccgag tggaaaggcc gcattaacca gaaggatggg gatggctgca ctgtcctgca
 480
 cgtcgtcgct gccactccc caggatacct cgtaagcga caaacagagg atgtgcagat
 540
 gctcctgcgc tttggggcag atcccacttt gctggatcga cagtctcggt ctgttgtgga
 600
 tgtcctgaag aggaataaga acttcaaagc catcgagaaa atcaacagtc acttagaaaa
 660
 gctagc
 666

<210> 1342

<211> 209

<212> PRT

<213> Homo sapiens

<400> 1342

Met	Ser	Ser	Asp	Ser	Ile	Val	Leu	Gln	Ser	Phe	Leu	Pro	Cys	Phe	Asp
1				5					10					15	
His	Ile	Phe	Thr	Thr	Gly	Phe	Pro	Thr	Glu	Val	Trp	Gln	Ser	Val	Ile
			20					25				30			
Glu	Lys	Leu	Ala	Lys	Lys	Gly	Leu	Trp	His	Ser	Phe	Leu	Leu	Leu	Ser
			35				40					45			
Ala	Lys	Lys	Asp	Arg	Leu	Pro	Arg	Asn	Ile	His	Val	Pro	Glu	Leu	Ser
			50				55				60				
Leu	Lys	Ser	Leu	Phe	Glu	Lys	Tyr	Val	Phe	Ile	Gly	Leu	Tyr	Glu	Lys
65					70				75					80	
Met	Glu	Gln	Val	Pro	Lys	Leu	Val	Gln	Trp	Leu	Ile	Ser	Ile	Gly	Ala
					85				90					95	
Ser	Val	Glu	Thr	Ile	Gly	Pro	Tyr	Pro	Leu	His	Ala	Leu	Met	Arg	Leu
			100				105					110			
Cys	Ile	Gln	Ala	Arg	Glu	Asn	His	Leu	Phe	Arg	Trp	Leu	Met	Asp	His
			115				120				125				
Lys	Pro	Glu	Trp	Lys	Gly	Arg	Ile	Asn	Gln	Lys	Asp	Gly	Asp	Gly	Cys
			130				135				140				
Thr	Val	Leu	His	Val	Val	Ala	Ala	His	Ser	Pro	Gly	Tyr	Leu	Val	Lys
145					150				155					160	
Arg	Gln	Thr	Glu	Asp	Val	Gln	Met	Leu	Leu	Arg	Phe	Gly	Ala	Asp	Pro
					165				170					175	
Thr	Leu	Leu	Asp	Arg	Gln	Ser	Arg	Ser	Val	Val	Asp	Val	Leu	Lys	Arg
			180				185					190			
Asn	Lys	Asn	Phe	Lys	Ala	Ile	Glu	Lys	Ile	Asn	Ser	His	Leu	Glu	Lys
			195				200					205			

Leu

<210> 1343

<211> 270

<212> DNA

<213> Homo sapiens

<400> 1343

ccggaatgt gccgagttct cctgacgcac gaagtgatgt gtagtcgatg ctgcgaaaag
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 aaaagctgtg gaaaccgaaa tgagactcca tcggaccagc tcataattga cagattcttt
 120
 ttaaaatttt toctcaagtg caatcagaat tgtttgaaaa cagcaggaaa cccaaggggac
 180
 atgagacggt ttcaggttgt gttgtcaaca acggtgaatg tggatggaca cgctctggct
 240
 gtttctgaca acatgtttgt tcataacaac
 270

<210> 1344

<211> 90

<212> PRT

<213> Homo sapiens

<400> 1344

Pro Glu Met Cys Arg Val Leu Leu Thr His Glu Val Met Cys Ser Arg
 1 5 10 15
 Cys Cys Glu Lys Lys Ser Cys Gly Asn Arg Asn Glu Thr Pro Ser Asp
 20 25 30
 Pro Val Ile Ile Asp Arg Phe Phe Leu Lys Phe Phe Leu Lys Cys Asn
 35 40 45
 Gln Asn Cys Leu Lys Thr Ala Gly Asn Pro Arg Asp Met Arg Arg Phe
 50 55 60
 Gln Val Val Leu Ser Thr Thr Val Asn Val Asp Gly His Val Leu Ala
 65 70 75 80
 Val Ser Asp Asn Met Phe Val His Asn Asn
 85 90

<210> 1345

<211> 402

<212> DNA

<213> Homo sapiens

<400> 1345

acgcgtttga aaccaccga tgactgtctg gtgatcctgg gtaccccgct cagcaacttc
 60
 agcggcaccg acaaccaccga ctctctacgac ccgaccaagg ccgacaaccg tctcacctac
 120
 cgccagacgg cgcgtcgtac gccctatgcc ggcctcgtct acgacctgaa tgacatctgg
 180
 tcggtgtaca ccagctacac caagatctac aagccgcaga acagcaaggga cgccgaccgc
 240
 aagttgctcg atccgattga aggtgacacc tacgaagccg ggctcaaggc agcgtttttc
 300
 gacggccgcc tgaacgccag ttttccgcga ttccgcctcg aacaggacaa cgctcgacag
 360

tacgtttccg ggtttgagac cgactcgtgt atcgccatt gc
402

<210> 1346

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1346

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Thr Arg Leu Lys Pro Thr Asp Asp Leu Ser Val Ile Leu Gly Thr Arg
 1             5             10             15
Val Ser Asn Phe Ser Gly Thr Asp Asn Thr Asp Phe Tyr Asp Pro Thr
          20             25             30
Lys Ala Asp Asn Arg Leu Thr Tyr Arg Gln Thr Gly Val Val Thr Pro
          35             40             45
Tyr Ala Gly Ile Val Tyr Asp Leu Asn Asp Ile Trp Ser Val Tyr Thr
          50             55             60
Ser Tyr Thr Lys Ile Tyr Lys Pro Gln Asn Ser Lys Asp Ala Asp Arg
          65             70             75             80
Lys Leu Leu Asp Pro Ile Glu Gly Asp Thr Tyr Glu Ala Gly Leu Lys
          85             90             95
Ala Ala Phe Phe Asp Gly Arg Leu Asn Ala Ser Phe Ala Ala Phe Arg
          100            105            110
Ile Glu Gln Asp Asn Val Ala Gln Tyr Val Ser Gly Phe Glu Thr Asp
          115            120            125
Ser Cys Ile Ala His Cys
          130

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<210> 1347

<211> 415

<212> DNA

<213> Homo sapiens

<400> 1347

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120
tgctcttaag gaactccatc ttactgggtg gagccaaacg agaaaagaga gctcgggagg
180
gcaccaaagc ggtcttgcgc aaattgcctg aggcagggga aggggcacgc tttctgaaaa
240
acccccccaa accgattcca ggaagcccaa agggcgggccc ctctgccgcg agcactgcct
300
tcacgtttac ttccatcccg gcctctctct tcccctaagg ctggcatgc aacatccctg
360
cttctcacc cctttttatt taagactcct attatctgca cacaatggaa gtttag
415

```

<210> 1348

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1348

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Met Glu Val Asn Val Lys Ala Val Leu Arg Ala Glu Gly Pro Pro Phe
 1           5           10           15
Gly Leu Pro Gly Ile Gly Leu Gly Gly Phe Phe Arg Lys Arg Ala Pro
 20           25           30
Ser Pro Ala Ser Gly Asn Phe Gly Lys Thr Ala Leu Val Pro Ser Arg
 35           40           45
Ala Leu Phe Ser Arg Leu Ala Pro Pro Ser Lys Met Glu Phe Leu Lys
 50           55           60
Ser Lys Val Leu Gln Leu Phe Leu Ile Phe Tyr Pro Gln Pro Leu Ala
 65           70           75           80
Gly Phe Pro Arg Pro Ser Gln Ser Leu Ile Asn Ala Ser Trp Asn Glu
 85           90           95
Arg Met Arg Ala Cys Pro Glu Gly Gly
 100           105

```

<210> 1349

<211> 924

<212> DNA

<213> Homo sapiens

<400> 1349

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gctcagacgg tcatgcgttc gatcgccgaa aagcttgccc ttcgggtcat cgtaaagccg
120
gcacgtgggg gctcaagcct cggcgtcaca aaagtcgatg gcgtcgacga tcttctctcag
180
gccgtogcga acgcctatgc ctatgacgac atggtttagt tcgaggaatt cattgtggggc
240
aacgaactcg caataggcat gatcacgacg tctgaaggca cgcgtgtgct gccagccgct
300
gagatttcgc ctgtcgggtg tgtttatgat tattcagcga tgtacaccgg tgggtgagaca
360
cgactaacag ctctcgaga cattagcgat acgcgcgccc aaaccgcgac ggcgatggcc
420
cgagtcgtgc aaaaggagct cgatttctcc gggatatctc gtgtcgatgc gatcgtggac
480
gagtcgggtc gccagtttt cttggaggcc ggtgctgtcc ccgggatgac agctacttcg
540
ctcgtacccg tggctatgaa agctgccggt ctagaccttg gcgaggtgtg ctctcgacta
600
gtcgtatgacg tcgctcgcaa ccatggctga cagtgtgacg acgaggggct cgcgccacgc
660
cgtgcgctc aagcaggcat ctgtcgtctt gctcggcgct gtccttgcca gtgtgatggt
720
cttctctgga ctgtggcaga tgaacgtttt tgagtcctcaa cgtgacgact cgacgcaggg
780
gcgtatcaac gagccagtga tcacctggaa tgaggcgccct aagaaggcca gtgtcatggc
840
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900
aggcacatcg tggccagtac gcgt
924

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<210> 1350
 <211> 209
 <212> PRT
 <213> Homo sapiens

<400> 1350
 Ala Gly Ile Val Thr Pro Gln Gln Val Ala Leu Pro His Asp Val Phe
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 Arg Glu Leu Gly Ala Gln Thr Val Met Arg Ser Ile Ala Glu Lys Leu
 20 25 30
 Gly Leu Pro Val Ile Val Lys Pro Ala Arg Gly Gly Ser Ser Leu Gly
 35 40 45
 Val Thr Lys Val Asp Gly Val Asp Asp Leu Pro Gln Ala Val Ala Asn
 50 55 60
 Ala Tyr Ala Tyr Asp Asp Met Val Val Val Glu Glu Phe Ile Val Gly
 65 70 75 80
 Asn Glu Leu Ala Ile Gly Met Ile Thr Thr Ser Glu Gly Thr Arg Val
 85 90 95
 Leu Pro Ala Val Glu Ile Arg Pro Val Gly Gly Val Tyr Asp Tyr Ser
 100 105 110
 Ala Met Tyr Thr Gly Gly Glu Thr Arg Leu Thr Ala Pro Ala Asp Ile
 115 120 125
 Ser Asp Thr Ala Ala Gln Thr Ala Thr Ala Met Ala Arg Val Val Gln
 130 135 140
 Lys Glu Leu Asp Phe Ser Gly Ile Ser Arg Val Asp Ala Ile Val Asp
 145 150 155 160
 Glu Ser Gly Arg Pro Val Phe Leu Glu Ala Gly Ala Ala Pro Gly Met
 165 170 175
 Thr Ala Thr Ser Leu Val Pro Val Ala Met Lys Ala Ala Gly Leu Asp
 180 185 190
 Leu Gly Glu Val Cys Ser Arg Leu Val Asp Asp Val Ala Arg Asn His
 195 200 205
 Gly

<210> 1351
 <211> 398
 <212> DNA
 <213> Homo sapiens

<400> 1351
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 gacgagacgc aaaacgcatt gcttctcagt attctgctgc acccgggtct gctcatcgctc
 120
 gaccacattc acttcagta caacgggttc ctaattcgcg ggcaccttta tcgtttgggg
 180
 gccgcacgg acgcatcggc cctctttctc tgaaccgccc tgtttgctc gctgtccag
 240
 ttcaagcaca ttacgtata cgtcgcgccg gogtactttg tgtacctgct gcgtgcgtac
 300
 atgctcccg gcatgccgac gtccgcacgc acgggggagcg cggcgatcga tcgcaccatc
 360

aagcttggcg cagcgacgct ggtgccttcc tgctgagc
398

<210> 1352
<211> 70
<212> PRT
<213> Homo sapiens

<400> 1352
Xaa Cys Thr Glu Gly Val Leu Val Tyr Ala Leu Tyr Leu Leu Ser Arg
1 5 10 15
Cys Thr Met Gly Asp Glu Thr Gln Asn Ala Leu Leu Ser Ile Leu
20 25 30
Leu His Pro Gly Leu Leu Ile Val Asp His Ile His Phe Gln Tyr Asn
35 40 45
Gly Phe Leu Ile Arg Gly Pro Leu Tyr Arg Leu Gly Ala Arg Thr Asp
50 55 60
Ala Ser Ala Leu Phe Leu
65 70

<210> 1353
<211> 480
<212> DNA
<213> Homo sapiens

<400> 1353
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accctcacac ccacccccacc cccagtcaca cggtatcgtgc ggggcattgg acagcctcgg
120
ggcaacatgc tccctgggtggg tatcggggggc agcggacgcc agagtctggc ccgctgggct
180
tcatccatct gcgactacac caccttccag atcgagggtca ccaaacatta tcggaagcag
240
gagttccgag atgatatcaa gcgtctgtat cgccaggctg ggggtggagct caagaccacg
300
tccttcattt ttgtggacac ccaaatagct gatgagtcct tcctagagga catcaacaac
360
atcctcagct caggcgaggt gcccacatctt ttcaggcctg atgaattga agagatccag
420
tcgcataatca tagaccaggc ccgggtggag cagggtgcctg agtcacggga cagcctcttc
480

<210> 1354
<211> 160
<212> PRT
<213> Homo sapiens

<400> 1354
Xaa Ala Pro Ile Pro Ser Leu Gly Pro Gly Gly Pro Leu Ser Leu Leu
1 5 10 15
Ser Gln Leu Ile Thr Leu Thr Pro Thr Pro Pro Pro Val Thr Arg Ile
20 25 30
Val Arg Gly Ile Gly Gln Pro Arg Gly Asn Met Leu Leu Val Gly Ile

	35		40		45	
Gly	Gly	Ser	Gly	Arg	Gln	Ser
	50		55		60	
Asp	Tyr	Thr	Thr	Phe	Gln	Ile
65			70		75	
Glu	Phe	Arg	Asp	Asp	Ile	Lys
			85		90	
Leu	Lys	Thr	Thr	Ser	Phe	Ile
			100		105	
Ser	Phe	Leu	Glu	Asp	Ile	Asn
			115		120	
His	Leu	Phe	Arg	Pro	Asp	Glu
			130		135	
Asp	Gln	Ala	Arg	Val	Glu	Gln
145			150		155	

<210> 1355

<211> 1063

<212> DNA

<213> Homo sapiens

<400> 1355

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gccctgtcct agggccccacc cggtcagtgc acacctgtgc cccagtcctc cctccacaaa
120
ggccctgtga gacctgtgcc tccaccgcct ctttcttgt gtccattccc tgagcctggg
180
gaagtgtcgt cagagccaca ggtcggngag acgctgagtc tgggctgagc cttgtgccc
240
gacagctgga gaaacagcag cggggggccc tgtccatgtg gcaagccaag ccatcgaggg
300
gatcacaggc cccttcaggg aagggactga gcacctgcca cctgcctcca ggatgggcct
360
gatccccccc cctgtgtacc ccacaggctg cagtgcacct gccagcaca cacctgcggg
420
ggcacctgcy accgctgctg ccccggttc aatcagcagc cgtggaagcc tgcgactgcc
480
aacagtgcc aagagtgcc gtccctgtaac tgctacgccc atgccaccga ctgttactac
540
gacctgtgag tggaccggcg ccgcgccagc cagagcctgg atggcaccta tcaggggtggg
600
ggtgtctgta tcgactgcc aaccacacac gccggcgcca actgtgagcg ctgcctgccc
660
ggcttctacc gctctcccaa ccacctcttc gactcgcccc acgtctgccc ccgtgcgaac
720
tgcgagtcgg acttcacgga tggcacctgc gaggacctga cgggtcgatg ctactcgccg
780
cccaacttct ctggggagcg gtgtgacgtg tgtgccgagg gcttcacggg ctcccaagc
840
tgctacccca cgccctcgtc ctccaatgac accagggagc aggtgtgccc agccggccag
900
attgtgaatt gtgactgcag cgcggcaggg acccaggaga acgcttgccc gaaggaccga
960

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aggggtgggccc gctgtttttgc caaccccaac ttccaaggca cccattgtga gctctgcgag
 1020
 ccagggtttct acggcccccggt ctgcctctggg tcccttcacg cgt
 1063

<210> 1356
 <211> 244
 <212> PRT
 <213> Homo sapiens

<400> 1356
 Ala Pro Ala Thr Cys Leu Gln Asp Gly Pro Asp Pro Pro Ser Cys Val
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 Pro His Arg Leu Gln Cys Thr Cys Gln His Asn Thr Cys Gly Gly Thr
 20 25 30
 Cys Asp Arg Cys Cys Pro Gly Phe Asn Gln Gln Pro Trp Lys Pro Ala
 35 40 45
 Thr Ala Asn Ser Ala Asn Glu Cys Gln Ser Cys Asn Cys Tyr Gly His
 50 55 60
 Ala Thr Asp Cys Tyr Tyr Asp Pro Glu Val Asp Arg Arg Arg Ala Ser
 65 70 75 80
 Gln Ser Leu Asp Gly Thr Tyr Gln Gly Gly Val Cys Ile Asp Cys
 85 90 95
 Gln His His Thr Ala Gly Val Asn Cys Glu Arg Cys Leu Pro Gly Phe
 100 105 110
 Tyr Arg Ser Pro Asn His Pro Leu Asp Ser Pro His Val Cys Arg Arg
 115 120 125
 Cys Asn Cys Glu Ser Asp Phe Thr Asp Gly Thr Cys Glu Asp Leu Thr
 130 135 140
 Gly Arg Cys Tyr Cys Arg Pro Asn Phe Ser Gly Glu Arg Cys Asp Val
 145 150 155 160
 Cys Ala Glu Gly Phe Thr Gly Phe Pro Ser Cys Tyr Pro Thr Pro Ser
 165 170 175
 Ser Ser Asn Asp Thr Arg Glu Gln Val Leu Pro Ala Gly Gln Ile Val
 180 185 190
 Asn Cys Asp Cys Ser Ala Ala Gly Thr Gln Gly Asn Ala Cys Arg Lys
 195 200 205
 Asp Pro Arg Val Gly Arg Cys Phe Ala Asn Pro Asn Phe Gln Gly Thr
 210 215 220
 His Cys Glu Leu Cys Ala Pro Gly Phe Tyr Gly Pro Gly Cys Pro Gly
 225 230 235 240
 Ser Leu His Ala

<210> 1357
 <211> 663
 <212> DNA
 <213> Homo sapiens

<400> 1357
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 120

ttcaacaccc ccgttttggc tgtggggggg gtacgcccgt taatcctgca aagcccggt
 180
 tgggttcgcg ggggttttcgt cggctctccc aaccatcatc tagacggcgt ggcgatgtgg
 240
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 300
 ctggctcatc gagcttcagc gtcagtcaag tcgcaattgc ggcgcgacat cctgcaagcc
 360
 aggttgctgc gtcccactga cgcaacaatg ccgtcgagaa ccctcatcag cctgatgaca
 420
 acaggtcttg acgcccctga cggctactac tcgaagtacc tccccagct tgtgctggcc
 480
 gtcacgtgac cagcagtgct agccaccgct atcggcctaa acgacctcac cagcctcgtc
 540
 atcgtcgtcg tgacgatccc gtcacatccc gttttcatgg ccctcattgg ctggcggacc
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 660
 ctg
 663

<210> 1358

<211> 221

<212> PRT

<213> Homo sapiens

<400> 1358

Xaa	Pro	Pro	Pro	Gly	Gly	Gly	Gly	Gly	Gly	Asn	Asn	Thr	Arg	Lys
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Val	Asp	Arg	Tyr	Pro	Ser	Trp	Ser	Ser	Trp	Ser	Ile	Tyr	Gly	Pro
			20					25					30	
Cys	Gly	Phe	Gly	Thr	Glu	Val	Glu	Phe	Asn	Thr	Pro	Val	Leu	Pro
			35					40					45	
Gly	Gly	Val	Arg	Pro	Val	Ile	Leu	Gln	Arg	Pro	Gly	Trp	Cys	Pro
			50				55				60			
Val	Phe	Val	Gly	Leu	Pro	Asn	His	His	Leu	Asp	Gly	Val	Ala	Met
					70					75				80
Cys	Glu	Leu	Leu	Ala	Ala	Val	Phe	Cys	Ala	Arg	Ala	Cys	Leu	Ala
				85					90				95	
Leu	Gln	Glu	Ser	Leu	Ala	His	Arg	Ala	Ser	Ala	Ser	Val	Lys	Ser
			100				105					110		
Leu	Arg	Arg	Asp	Ile	Leu	Gln	Ala	Arg	Leu	Ser	Arg	Pro	Thr	Asp
			115				120					125		
Thr	Met	Pro	Ser	Arg	Thr	Leu	Ile	Ser	Leu	Met	Thr	Thr	Gly	Leu
			130				135					140		
Ala	Leu	Asp	Gly	Tyr	Tyr	Ser	Lys	Tyr	Leu	Pro	Gln	Leu	Val	Leu
			145				150				155			160
Val	Ile	Val	Pro	Ala	Val	Leu	Ala	Thr	Ala	Ile	Gly	Leu	Asn	Asp
				165				170					175	
Thr	Ser	Leu	Val	Ile	Val	Val	Val	Thr	Ile	Pro	Leu	Ile	Pro	Val
			180					185					190	
Met	Ala	Leu	Ile	Gly	Trp	Arg	Thr	Glu	Ala	Ala	Val	Ala	Lys	Arg
			195				200					205		
Lys	Val	Ala	Thr	Arg	Leu	Ala	Asn	His	Phe	Ala	Asp	Leu		

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210                               215                               220

<210> 1359
<211> 423
<212> DNA
<213> Homo sapiens

<400> 1359
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120
ctattttgctt aatagataga gaggtgtagt cagctagcca atagccgact ggcacgcgca
180
cgacgtaatc gtcttcccat aaagggtaaa atacatcacc ttctttgggtg taactgtcgc
240
aagtaaagcg taaatcagcg ctttctgagg catcgactaa actgagtgtg agtctctgaa
300
tatcgtcgag catggttttg atcacttgac taatcagggg gccagataga aaaggtgcta
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420
ctt
423

<210> 1360
<211> 104
<212> PRT
<213> Homo sapiens

<400> 1360
Met Leu Asp Asp Ile Pro Gly Leu Thr Leu Ser Leu Val Asp Ala Ser
1      5      10
Glu Ser Ala Asp Leu Arg Phe Thr Cys Asp Ser Tyr Thr Lys Glu Asp
20     25     30
Asp Val Phe Tyr Pro Leu Trp Glu Asp Asp Tyr Val Val Ala Met Pro
35     40     45
Val Gly Tyr Trp Leu Ala Asp Tyr Thr Ser Leu Ser Ile Lys Gln Ile
50     55     60
Asp Lys Gln Pro Phe Val Ser Arg Thr Pro Cys Asp Ile Leu Glu Ser
65     70     75     80
Trp Asn Phe Ile Met Gln Lys Gln Gly Leu Ser Thr Asp Val Arg Ala
85     90     95
Gln Val Lys Thr Glu Glu Tyr Ala
100

<210> 1361
<211> 5300
<212> DNA
<213> Homo sapiens

<400> 1361
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60

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acggggcccg cagagcgcg gccgtcgggtg cccttgacca tggcgggcggtg tgcgcttctg
120
ctggggcgctgg cgctgctggc accgcgggcg gccggcgcggtg gcatggggcg gtgctatgac
180
ggcgcgaggcg gcccgcgcg ctgcctgcgg gtgttcgaga acgcgcggtt tggggcggtc
240
gcccaggcct gcacacgctg cggcagcccg cccgaggact tctgtcccca cgtggggcgcc
300
gcggggcgcggg ggggtcattg ccagcgctgc gacgcccgcc acccccagcg ccaccacaac
360
gcctcctacc tcaccgactt ccacagccag gacgagagca cctgggtggca gagcccgtcc
420
atggccttgc gcgtgcagta cccacacctg gtcaacatca ccctccgctt aggggaaggct
480
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540
tacaagcgca gccgcgcga cggcccatgg gagccctacc agttctacag cgcctctctg
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660
gccttctgca cctctgagtt cagcgacatc tccccgctga gtggcgggcaa cgtggccttc
720
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780
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840
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960
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1020
ttccaggacc gcccggtgggc cgggggcacc gccgaggctg cccacgagtg tctgccctgc
1080
aactgcagtg gcgcctccga ggaatgcacg ttgtatcggt agctcttctg cagcacaggc
1140
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1200
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1320
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1380
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1440
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1500
aacctgcagc cccacaatcc agctggctgc agcagctgtt tctgctatgg ccaactcaag
1560
gtgtgcgcgt ccaactgccc gtccaggtg catcacatcc tcagcgattt ccaccaggga
1620
gccgaaggtt ggtggggcag aagtggtggg ggctctgagc actccccaca atggagccca
1680

aatgggggtcc tectgagccc agaagacgag gaggagctca cagcaccagg gaagtctctg
1740
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<210> 1362

<211> 1587

<212> PRT

<213> Homo sapiens

<400> 1362

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 Gln Arg Cys Leu Pro Val Phe Glu Asn Ala Ala Phe Gly Arg Leu Ala
 35 40 45
 Gln Ala Ser His Thr Cys Gly Ser Pro Pro Glu Asp Phe Cys Pro His
 50 55 60
 Val Gly Ala Ala Gly Ala Gly Ala His Cys Gln Arg Cys Asp Ala Ala
 65 70 75 80
 Asp Pro Gln Arg His His Asn Ala Ser Tyr Leu Thr Asp Phe His Ser
 85 90 95
 Gln Asp Glu Ser Thr Trp Trp Gln Ser Pro Ser Met Ala Phe Gly Val
 100 105 110
 Gln Tyr Pro Thr Ser Val Asn Ile Thr Leu Arg Leu Gly Lys Ala Tyr
 115 120 125
 Glu Ile Thr Tyr Val Arg Leu Lys Phe His Thr Ser Arg Pro Glu Ser
 130 135 140
 Phe Ala Ile Tyr Lys Arg Ser Arg Ala Asp Gly Pro Trp Glu Pro Tyr
 145 150 155 160
 Gln Phe Tyr Ser Ala Ser Cys Gln Lys Thr Tyr Gly Arg Pro Glu Gly
 165 170 175
 Gln Tyr Leu Arg Pro Gly Glu Asp Glu Arg Val Ala Phe Cys Thr Ser
 180 185 190
 Glu Phe Ser Asp Ile Ser Pro Leu Ser Gly Gly Asn Val Ala Phe Ser
 195 200 205
 Thr Leu Glu Gly Arg Pro Ser Ala Tyr Asn Phe Glu Glu Ser Pro Gly
 210 215 220
 Leu Gln Glu Trp Val Thr Ser Thr Glu Leu Leu Ile Ser Leu Asp Arg
 225 230 235 240
 Leu Asn Thr Phe Gly Asp Asp Ile Phe Lys Asp Pro Lys Val Leu Gln
 245 250 255
 Ser Tyr Tyr Tyr Ala Val Ser Asp Phe Ser Val Gly Gly Arg Cys Lys

	260		265		270
Cys Asn Gly His Ala Ser Glu Cys Gly Pro Asp Val Ala Gly Gln Leu					
	275		280		285
Ala Cys Arg Cys Gln His Asn Thr Thr Gly Thr Asp Cys Glu Arg Cys					
	290		295		300
Leu Pro Phe Phe Gln Asp Arg Pro Trp Ala Arg Gly Thr Ala Glu Ala					
305		310		315	320
Ala His Glu Cys Leu Pro Cys Asn Cys Ser Gly Arg Ser Glu Glu Cys					
	325		330		335
Thr Phe Asp Arg Glu Leu Phe Arg Ser Thr Gly His Gly Gly Arg Cys					
	340		345		350
His His Cys Arg Asp His Thr Ala Gly Pro His Cys Glu Arg Cys Gln					
	355		360		365
Glu Asn Phe Tyr His Trp Asp Pro Arg Met Pro Cys Gln Pro Cys Asp					
	370		375		380
Cys Gln Ser Ala Gly Ser Leu His Leu Gln Cys Asp Thr Gly Thr					
385		390		395	400
Cys Ala Cys Lys Pro Thr Val Thr Gly Trp Lys Cys Asp Arg Cys Leu					
	405		410		415
Pro Gly Phe His Ser Leu Ser Glu Gly Gly Cys Arg Pro Cys Thr Cys					
	420		425		430
Asn Pro Ala Gly Ser Leu Asp Thr Cys Asp Pro Arg Ser Gly Arg Cys					
	435		440		445
Pro Cys Lys Glu Asn Val Glu Gly Asn Leu Cys Asp Arg Cys Arg Pro					
	450		455		460
Gly Thr Phe Asn Leu Gln Pro His Asn Pro Ala Gly Cys Ser Ser Cys					
465		470		475	480
Phe Cys Tyr Gly His Ser Lys Val Cys Ala Ser Thr Ala Gln Phe Gln					
	485		490		495
Val His His Ile Leu Ser Asp Phe His Gln Gly Ala Glu Gly Trp Trp					
	500		505		510
Ala Arg Ser Val Gly Gly Ser Glu His Ser Pro Gln Trp Ser Pro Asn					
	515		520		525
Gly Val Leu Leu Ser Pro Glu Asp Glu Glu Glu Leu Thr Ala Pro Gly					
	530		535		540
Lys Phe Leu Gly Asp Gln Arg Phe Ser Tyr Gly Gln Pro Leu Ile Leu					
545		550		555	560
Thr Phe Arg Val Pro Pro Gly Asp Ser Pro Leu Pro Val Gln Leu Arg					
	565		570		575
Leu Glu Gly Thr Gly Leu Ala Leu Ser Leu Arg His Ser Ser Leu Ser					
	580		585		590
Gly Pro Gln Asp Ala Arg Ala Ser Gln Gly Gly Arg Ala Gln Val Pro					
	595		600		605
Leu Gln Glu Thr Ser Glu Asp Val Ala Pro Pro Leu Pro Pro Phe His					
	610		615		620
Phe Gln Arg Leu Leu Ala Asn Leu Thr Ser Leu Arg Leu Arg Val Ser					
625		630		635	640
Pro Gly Pro Ser Pro Ala Gly Pro Val Phe Leu Thr Glu Val Arg Leu					
	645		650		655
Thr Ser Ala Arg Pro Gly Leu Ser Pro Pro Ala Ser Trp Val Glu Ile					
	660		665		670
Cys Ser Cys Pro Thr Gly Tyr Thr Gly Gln Phe Cys Glu Ser Cys Ala					
	675		680		685
Pro Gly Tyr Lys Arg Glu Met Pro Gln Gly Gly Pro Tyr Ala Ser Cys					

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Val Pro Cys Thr Cys Asn Gln His Gly Thr Cys Asp Pro Asn Thr Gly		
705	710	715
Ile Cys Val Cys Ser His His Thr Glu Gly Pro Ser Cys Glu Arg Cys		720
	725	730
Leu Pro Gly Phe Tyr Gly Asn Pro Phe Ala Gly Gln Ala Asp Asp Cys		735
	740	745
Gln Pro Cys Pro Cys Pro Gly Gln Ser Ala Cys Thr Thr Ile Pro Glu		750
	755	760
Ser Gly Glu Val Val Cys Thr His Cys Pro Pro Gly Gln Arg Gly Arg		765
	770	775
Arg Cys Glu Val Cys Asp Asp Gly Phe Phe Gly Asp Pro Leu Gly Leu		780
	785	790
Phe Gly His Pro Gln Pro Cys His Gln Cys Gln Cys Ser Gly Asn Val		795
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Asp Pro Asn Ala Val Gly Asn Cys Asp Pro Leu Ser Gly His Cys Leu		810
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Arg Cys Leu His Asn Thr Thr Gly Asp His Cys Glu His Cys Gln Glu		825
	830	835
Gly Phe Tyr Gly Ser Ala Leu Ala Pro Arg Pro Ala Asp Lys Cys Met		840
	845	850
Pro Cys Ser Cys His Pro Gln Gly Ser Val Ser Glu Gln Met Pro Cys		855
	860	865
Asp Pro Val Thr Gly Gln Cys Ser Cys Leu Pro His Val Thr Ala Arg		870
	875	880
Asp Cys Ser Arg Cys Tyr Pro Gly Phe Phe Asp Leu Gln Pro Gly Arg		885
	890	895
Gly Cys Arg Ser Cys Lys Cys His Pro Leu Gly Ser Gln Glu Asp Gln		900
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Cys His Pro Lys Thr Gly Gln Cys Thr Cys Arg Pro Gly Val Thr Gly		915
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Gln Ala Cys Asp Arg Cys Gln Leu Gly Phe Phe Gly Ser Ser Ile Lys		930
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Gly Cys Arg Ala Cys Arg Cys Ser Pro Leu Gly Ala Ala Ser Ala Gln		945
	950	955
Cys His Tyr Asn Gly Thr Cys Val Cys Arg Pro Gly Phe Glu Gly Tyr		960
	965	970
Lys Cys Asp Arg Cys His Tyr Asn Phe Phe Leu Thr Ala Asp Gly Thr		975
	980	985
His Cys Gln Gln Cys Pro Ser Cys Tyr Ala Leu Val Lys Glu Glu Thr		990
	995	1000
Ala Lys Leu Lys Ala Arg Leu Thr Leu Thr Glu Gly Trp Leu Gln Gly		1005
	1010	1015
Ser Asp Cys Gly Ser Pro Trp Gly Pro Leu Asp Ile Leu Leu Gly Glu		1020
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Ala Pro Arg Gly Asp Val Tyr Gln Gly His His Leu Leu Pro Gly Ala		1035
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Arg Glu Ala Phe Leu Glu Gln Met Met Gly Leu Glu Gly Ala Val Lys		1050
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Ala Ala Arg Glu Gln Leu Gln Arg Leu Asn Lys Gly Ala Arg Cys Ala		1065
	1070	1075
Gln Ala Gly Ser Gln Lys Thr Cys Thr Gln Leu Ala Asp Leu Glu Ala		1080
	1085	1090
Val Leu Glu Ser Ser Glu Glu Glu Ile Leu His Ala Ala Ala Ile Leu		1095
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	1120	

	1125		1130		1135
Ala Ser Leu Glu Ile Pro Gln Glu Gly Pro Ser Gln Pro Thr Lys Trp					
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Ser His Leu Ala Ile Glu Ala Arg Ala Leu Ala Arg Ser His Arg Asp					
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Thr Ala Thr Lys Ile Ala Ala Thr Ala Trp Arg Ala Leu Leu Ala Ser					
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Asn Thr Ser Tyr Ala Leu Leu Trp Asn Leu Leu Glu Gly Arg Val Ala					
	1185		1190		1200
Leu Glu Thr Gln Arg Asp Leu Glu Asp Arg Tyr Gln Glu Val Gln Ala					
	1205		1210		1215
Ala Gln Lys Ala Leu Arg Thr Ala Val Ala Glu Val Leu Pro Glu Ala					
	1220		1225		1230
Glu Ser Val Leu Ala Thr Val Arg Gln Val Gly Ala Asp Thr Ala Pro					
	1235		1240		1245
Tyr Leu Ala Leu Leu Ala Ser Pro Gly Ala Leu Pro Gln Lys Ser Arg					
	1250		1255		1260
Ala Glu Asp Leu Gly Leu Lys Ala Lys Ala Leu Glu Lys Thr Val Ala					
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Ser Trp Gln His Met Ala Thr Glu Ala Ala Arg Thr Leu Gln Thr Ala					
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Ala Gln Ala Thr Leu Arg Gln Thr Glu Pro Leu Thr Met Ala Arg Ser					
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Arg Leu Thr Ala Thr Phe Ala Ser Gln Leu His Gln Glu Ala Arg Ala					
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Ala Leu Thr Gln Ala Ser Ser Ser Val Gln Ala Ala Thr Val Thr Val					
	1330		1335		1340
Met Gly Ala Arg Thr Leu Leu Ala Asp Leu Glu Gly Met Lys Leu Gln					
	1345		1350		1355
Phe Pro Arg Pro Lys Asp Gln Ala Ala Leu Gln Arg Lys Ala Asp Ser					
	1365		1370		1375
Val Ser Asp Arg Leu Leu Ala Asp Thr Arg Lys Lys Thr Lys Gln Ala					
	1380		1385		1390
Glu Arg Met Leu Gly Asn Ala Ala Pro Leu Ser Ser Ser Ala Lys Lys					
	1395		1400		1405
Lys Gly Arg Glu Ala Glu Val Leu Ala Lys Asp Ser Ala Lys Leu Ala					
	1410		1415		1420
Lys Ala Leu Leu Arg Glu Arg Lys Gln Ala His Arg Arg Ala Ser Arg					
	1425		1430		1435
Leu Thr Ser Gln Thr Gln Ala Thr Leu Gln Gln Ala Ser Gln Gln Val					
	1445		1450		1455
Leu Ala Ser Glu Ala Arg Arg Gln Glu Leu Glu Glu Ala Glu Arg Val					
	1460		1465		1470
Gly Ala Gly Leu Ser Glu Met Glu Gln Gln Ile Arg Glu Ser Arg Ile					
	1475		1480		1485
Ser Leu Glu Lys Asp Ile Glu Thr Leu Ser Glu Leu Leu Ala Arg Leu					
	1490		1495		1500
Gly Ser Leu Asp Thr His Gln Ala Pro Ala Gln Ala Leu Asn Glu Thr					
	1505		1510		1515
Gln Trp Ala Leu Glu Arg Leu Arg Leu Gln Leu Gly Ser Pro Gly Ser					
	1525		1530		1535
Leu Gln Arg Lys Leu Ser Leu Leu Glu Gln Glu Ser Gln Gln Gln Glu					
	1540		1545		1550
Leu Gln Ile Gln Gly Phe Glu Ser Asp Leu Ala Glu Ile Arg Ala Asp					

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 Ser Trp Gln
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<210> 1363
 <211> 392
 <212> DNA
 <213> Homo sapiens

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<210> 1364
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 1364
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 Val Lys Val Tyr Ser Ile Val Pro Leu Cys Phe Ala Ile Tyr Leu Leu
 20 25 30
 Cys Met Ser Cys Val Ser Ala Ser Pro Thr Gly His Gln Glu Gly Leu
 35 40 45
 Phe Met Val Ala Pro Pro Met Arg His Leu His Leu Pro Ser His Pro
 50 55 60
 Leu Lys Gln Pro His Leu Cys Arg Phe Arg Arg Phe Leu Leu Arg Leu
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 Arg Ala Gln Arg Gly Phe Pro Leu Arg Pro Cys Leu Arg Trp Arg Leu
 85 90 95
 Arg Leu Gln Trp Arg Leu Tyr Pro
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<210> 1365
 <211> 451
 <212> DNA
 <213> Homo sapiens

<400> 1365

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 240
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 360
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 451

<210> 1366

<211> 150

<212> PRT

<213> Homo sapiens

<400> 1366

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Pro	Trp	Asn	Glu	Val	Asp	Glu	Val	Trp	Pro	Asn	Val	Phe	Ile	Ala	Glu
		35				40						45			
Lys	Ser	Val	Ala	Val	Asn	Lys	Gly	Arg	Leu	Lys	Arg	Leu	Gly	Ile	Thr
		50				55					60				
His	Ile	Leu	Asn	Ala	Ala	His	Gly	Thr	Gly	Val	Tyr	Thr	Gly	Pro	Glu
		65			70				75					80	
Phe	Tyr	Thr	Gly	Leu	Glu	Ile	Gln	Tyr	Leu	Gly	Val	Glu	Val	Asp	Asp
			85					90						95	
Phe	Pro	Glu	Val	Asp	Ile	Ser	Gln	His	Phe	Arg	Lys	Ala	Ser	Glu	Phe
			100					105					110		
Leu	Asp	Glu	Ala	Leu	Leu	Thr	Tyr	Arg	Gly	Lys	Val	Leu	Val	Ser	Ser
			115					120				125			
Glu	Met	Gly	Ile	Ser	Arg	Ser	Ala	Val	Leu	Val	Val	Ala	Tyr	Leu	Met
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Ile	Phe	His	Asn	Met	Ala										
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<210> 1367

<211> 330

<212> DNA

<213> Homo sapiens

<400> 1367

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 120

tcgtctgcg attgctgctg gtcacgtcg cactgcccgt cagcgccactc gtcggccaga
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 330

<210> 1368
 <211> 82
 <212> PRT
 <213> Homo sapiens

<400> 1368
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 Ala Ser Ser Thr Ala Lys Ala Pro Ser Ser Ala Ser Pro Thr Ser Leu
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 Ala Thr Ser Thr Thr Pro Pro Trp Ser Ser Pro Ser Thr Ala Ser
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 Gly Trp Pro Arg Ser Ala Pro Ser Ser Ala Pro Pro Ser Pro Thr Ser
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 Thr Arg

<210> 1369
 <211> 356
 <212> DNA
 <213> Homo sapiens

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 180
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 356

<210> 1370
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 1370
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Gln Glu Gln Arg Glu Gln Leu Gln Val Leu Arg Gln Ala Ala Phe Glu			
	35	40	45
Val Glu Gly Glu Ser Ser Gly Ala Gly Leu Ser Ala Asp Arg Arg Arg			
	50	55	60
Ser Leu Cys Ala Arg Glu Phe Arg Lys Leu Gly Phe Ser Asn Ser Asn			
65	70	75	80
Pro Ala Gln Asp Leu Glu Arg Val Pro Pro Gly Leu Leu Ala Leu Asp			
	85	90	95
Asn Met Leu Tyr Phe Ser Arg Asn			
	100		

<210> 1371

<211> 648

<212> DNA

<213> Homo sapiens

<400> 1371

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120
cttatagaga agacatgttc caagtaccct ctttcctttg tctgcttttc tcatgggtac
180
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240
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300
ggaaagtcca tgccctcacc agagtaata ctaccatttc tccaaaactc tectcatgcc
360
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420
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480
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<210> 1372

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1372

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	20	25	30
Phe Leu Phe Val Glu Arg Ala Val Arg Leu Thr Gln Gln Leu Leu Glu			

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          35          40          45
Cys Leu Gly His Leu Arg Ala Trp Lys Val His Ala Leu Thr Arg Val
  50          55          60
Met Thr Thr Ile Ser Pro Lys Leu Ser Ser Cys His Pro Ile Gly Ser
  65          70          75          80
Ile Asp Gln Lys Gly Lys Ser Ser Val Leu Lys Leu Ile Asn Gln Leu
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Lys Leu Tyr Leu Gln
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<212> DNA
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<210> 1374
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<212> PRT
<213> Homo sapiens

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Glu Leu Phe Val Arg Cys Thr Thr Glu Asn Leu Ala Asp Gln Asn Pro
          35          40          45
Arg Leu Arg Ser Met Cys Val Pro Gly Arg Asp Thr Ser Cys Trp Arg
          50          55          60
Arg Lys Pro Ser Val Tyr Leu Glu Ala Lys Gly Phe Leu Asn Arg Gly
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<212> DNA

<213> Homo sapiens

<400> 1375

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 180
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<210> 1376

<211> 59

<212> PRT

<213> Homo sapiens

<400> 1376

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Phe	His	Leu	His	Gly	Trp	His	Trp	Pro	Ala	Phe	Asn	Ile	Ala	Asp	Met
		20						25				30			
Ala	Ile	Val	Gly	Gly	Ala	Ile	Ala	Leu	Val	Ala	Gln	Ser	Phe	Met	Ser
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<211> 6306

<212> DNA

<213> Homo sapiens

<400> 1377

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<210> 1378

<211> 798

<212> PRT

<213> Homo sapiens

<400> 1378

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			50				55				60				
Ile	Ser	Asn	Gln	Tyr	Asn	Asn	Glu	Pro	Ser	Asn	Ile	Phe	Glu	Lys	Ile
			65			70				75				80	
Asp	Glu	Glu	Asn	Glu	Ala	Asn	Leu	Leu	Ala	Val	Leu	Thr	Glu	Thr	Leu
				85				90					95		
Asp	Ser	Leu	Pro	Val	Asp	Glu	Asp	Gly	Leu	Pro	Ser	Phe	Asp	Ala	Leu
			100					105					110		
Thr	Asp	Gly	Asp	Val	Thr	Thr	Asp	Asn	Glu	Ala	Ser	Pro	Ser	Ser	Met

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130	135	140
Lys Lys Leu Leu Leu Ala	Pro Ala Asn Thr Gln Leu	Ser Tyr Asn Glu
145	150	155
Cys Ser Gly Leu Ser Thr	Gln Asn His Ala Asn His Asn His	Arg Ile
165	170	175
Arg Thr Asn Pro Ala Ile	Val Lys Thr Glu Asn Ser Trp Ser	Asn Lys
180	185	190
Ala Lys Ser Ile Cys Gln	Gln Gln Lys Pro Gln Arg Arg	Pro Cys Ser
195	200	205
Glu Leu Leu Lys Tyr Leu	Thr Thr Asn Asp Asp Pro	Pro His Thr Lys
210	215	220
Pro Thr Glu Asn Arg Asn	Ser Ser Arg Asp Lys Cys	Thr Ser Lys Lys
225	230	235
Lys Ser His Thr Gln Ser	Gln Ser Gln His Leu Gln	Ala Lys Pro Thr
245	250	255
Thr Leu Ser Leu Pro Leu	Thr Pro Glu Ser Pro	Asn Asp Pro Lys Gly
260	265	270
Ser Pro Phe Glu Asn Lys	Thr Ile Glu Arg Thr Leu	Ser Val Glu Leu
275	280	285
Ser Gly Thr Ala Gly Leu	Thr Pro Pro Thr Thr Pro	Pro His Lys Ala
290	295	300
Asn Gln Asp Asn Pro Phe	Arg Ala Ser Pro Lys	Leu Lys Ser Ser Cys
305	310	315
Lys Thr Val Val Pro Pro	Pro Ser Lys Lys Pro	Arg Tyr Ser Glu Ser
325	330	335
Ser Gly Thr Gln Gly Asn	Asn Ser Thr Lys Lys	Gly Pro Glu Gln Ser
340	345	350
Glu Leu Tyr Ala Gln Leu	Ser Lys Ser Ser Val Leu	Thr Gly Gly His
355	360	365
Glu Glu Arg Lys Thr Lys	Arg Pro Ser Leu Arg Leu	Phe Gly Asp His
370	375	380
Asp Tyr Cys Gln Ser Ile	Asn Ser Lys Thr Glu Ile	Leu Ile Asn Ile
385	390	395
Ser Gln Glu Leu Gln Asp	Ser Arg Gln Leu Glu	Asn Lys Asp Val Ser
405	410	415
Ser Asp Trp Gln Gly Gln	Ile Cys Ser Ser Thr Asp	Ser Asp Gln Cys
420	425	430
Tyr Leu Arg Glu Thr Leu	Glu Ala Ser Lys Gln Val	Ser Pro Cys Ser
435	440	445
Thr Arg Lys Gln Leu Gln	Asp Gln Glu Ile Arg Ala	Glu Leu Asn Lys
450	455	460
His Phe Gly His Pro Ser	Gln Ala Val Phe Asp Asp	Glu Ala Asp Lys
465	470	475
Thr Gly Glu Leu Arg Asp	Ser Asp Phe Ser Asn	Glu Gln Phe Ser Lys
485	490	495
Leu Pro Met Phe Ile Asn	Ser Gly Leu Ala Met Asp	Gly Leu Phe Asp
500	505	510
Asp Ser Glu Asp Glu Ser	Asp Lys Leu Ser Tyr Pro	Trp Asp Gly Thr
515	520	525
Gln Ser Tyr Ser Leu Phe	Asn Val Ser Pro Ser Cys	Ser Ser Phe Asn
530	535	540
Ser Pro Cys Arg Asp Ser	Val Ser Pro Pro Lys	Ser Leu Phe Ser Gln

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Thr	Arg	Thr	Glu	Leu	Arg	Asp	Arg	Phe	Glu	Val	Phe	Gly	Glu	Ile	Glu		
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Thr	Tyr	Arg	Tyr	Thr	Cys	Asp	Ala	Phe	Ala	Ala	Leu	Glu	Asn	Gly	Tyr		
			725					730						735			
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			740					745					750				
Arg	Lys	Gln	Phe	Phe	Lys	Ser	Asn	Tyr	Ala	Asp	Leu	Asp	Ser	Asn	Ser		
			755			760						765					
Asp	Asp	Phe	Asp	Pro	Ala	Ser	Thr	Lys	Ser	Lys	Tyr	Asp	Ser	Leu	Asp		
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<210> 1379

<211> 590

€212> DNA

<213> Homo sapiens

<400> 1379

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<210> 1380

<211> 141

<212> PRT

<213> Homo sapiens

<400> 1380

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Cys	Pro	Cys	Arg	Val	Ala	Ala	Ser	Pro	Ile	Ser	Ala	Leu	Gly	Val	Pro
		35					40				45				
Ala	Leu	Trp	Pro	Arg	His	Pro	Ser	Leu	Pro	Ser	Glu	Ser	Leu	Pro	Cys
	50					55				60					
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65				70					75					80	
Val	Xaa	Pro	Pro	Leu	Pro	Ser	Val	Ser	Leu	Pro	Cys	Gly	Arg	Val	Xaa
			85						90				95		
Pro	Pro	Leu	Pro	Ser	Val	Ser	Leu	Pro	Cys	Gly	Arg	Val	Xaa	Pro	Pro
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Leu	Pro	Ser	Val	Ser	Pro	Pro	Cys	Gly	Arg	Val	Xaa	Pro	Ser	Leu	Pro
		115					120					125			
Ser	Val	Ser	Pro	Pro	Cys	Gly	Arg	Val	Thr	His	Leu	Cys			
	130					135					140				

<210> 1381

<211> 433

<212> DNA

<213> Homo sapiens

<400> 1381

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 120
 gtgaggccac ggagagtcca ggccggagca cactgaccgc ctgggctaag cattcatttc
 180
 cgtgtctctg ctgccatcag agaggaggca ggtccacag atctgctctt gtttctctgtg
 240
 gtctgaagtg ggggttcagt ttctgtgttg aacaattcat taggggtttg atctcaaaagc
 300
 ccaggcattg gccctgtacc tgttctctcac ggaagccgaa ctctctgctta tgggccccag
 360
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 420
 cagctctcca tgg
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<210> 1382

<211> 123
 <212> PRT
 <213> Homo sapiens

<400> 1382
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 Thr Phe Trp Pro Arg Pro Asp Thr Met Cys Glu Ala Thr Glu Ser Pro
 20 25 30
 Gly Arg Ser Thr Leu Thr Ala Leu Ala Lys His Ser Phe Pro Cys Pro
 35 40 45
 Gly Cys His Gln Arg Gly Gly Arg Ser His Arg Ser Ala Leu Val Ser
 50 55 60
 Ala Gly Leu Lys Trp Gly Phe Ser Phe Cys Val Glu Gln Phe Ile Arg
 65 70 75 80
 Gly Leu Ile Ser Lys Pro Arg His Trp Pro Cys Thr Cys Ser Ser Arg
 85 90 95
 Lys Pro Asn Ser Cys Leu Trp Ala Pro Ala Tyr Arg Gln Pro Asn Gly
 100 105 110
 Leu Ala Pro Ala Lys Gly Leu Phe Gly Asp Leu
 115 120

<210> 1383
 <211> 906
 <212> DNA
 <213> Homo sapiens

<400> 1383
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 120
 tctgcagctg gtcctgggag acccacggcc tectctctcc tgeccctgac caatacacca
 180
 caaacgcctc acatgagctc acccacaccc ccaagagcca tggctgctcac aaagcaaaaga
 240
 ccaagccaga ctcaatcctg tggcccccag gtcagccgca gagcagacaa ctagaacctc
 300
 acaagaagct gaacacaggc tgggtcacct ataacaaggg aggccatcct gaagggaggga
 360
 agcaccacaac cagaggtgaa ctacacctgg accattcgac aatgcagtc aggcagaagt
 420
 aatgggcaca gttctnccgg cgtccccacg gcctggtctc tgaatgcgtt gagacagatt
 480
 gggcagctct ctgcatcatc atcagaattg aaagagccag cggcttcag tttccctga
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 906

<210> 1384
 <211> 97
 <212> PRT
 <213> Homo sapiens

<400> 1384
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 1 5 10 15
 Lys Val Thr Thr His His Ser Thr Pro Ala Ser Gly Leu Gln Ala Lys
 20 25 30
 Met Ala Pro Met Ser Thr Arg Val Ser Ala Ala Gly Pro Gly Arg Pro
 35 40 45
 Thr Ala Ser Ser Leu Leu Pro Leu Thr Asn Thr Pro Gln Thr Pro His
 50 55 60
 Met Ser Ser Pro Thr Pro Pro Arg Ala Met Val Leu Thr Lys Gln Arg
 65 70 75 80
 Pro Ser Gln Thr Gln Ser Cys Gly Pro Arg Val Ser Arg Arg Ala Asp
 85 90 95
 Asn

<210> 1385
 <211> 210
 <212> DNA
 <213> Homo sapiens

<400> 1385
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 gtggcggtgta tgcattggtgt gtgcacgtgt gcactgtgtg tgggggtgat gncattggtg
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 gtgcacatat gcactggggg gtgtgtatgc
 210

<210> 1386
 <211> 70
 <212> PRT
 <213> Homo sapiens

<400> 1386
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 1 5 10 15
 Val Val Cys Met Xaa Trp Cys Val His Val Cys Xaa Cys Val Cys Met
 20 25 30
 Val Met Cys Thr Cys Ala Leu Cys Val Ala Cys Met His Gly Val Cys

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      35              40              45
  ir Cys Ala Leu Cys Val Gly Cys Met Xaa Trp Trp Val His Ile Cys
      50              55              60
  Thr Gly Gly Cys Val Cys
  65              70

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<210> 1387
 <211> 521
 <212> DNA
 <213> Homo sapiens

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<400> 1387
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120
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180
ggcggcaagg agtccgaaga cgaagactcc gatagagggt gtgaacatcg gtgttccttt
240
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300
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360
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420
cgatgagatc gatgttgcc ttggagtggg aactcgggtc gaaggtgtac ccgatgaact
480
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521

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<210> 1388
 <211> 103
 <212> PRT
 <213> Homo sapiens

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<400> 1388
Gly Arg Asn Ser Thr Ser Glu Gly Asp Val Arg Ala His Glu Gly Thr
1      5      10      15
Lys Gly Gln Val Val Gln Ala Glu Gly Val Ser Gly Cys Gly Lys His
20      25      30
Ser Pro Gly Gly Gln His Thr Glu Ala Gly Glu Asp Glu Gly Val Val
35      40      45
Ala Ala Asp Gly Ser Ser Asp Ser Thr Ala Gly Asp Gly Gly Lys Glu
50      55      60
Ser Glu Asp Glu Asp Ser Asp Arg Gly Gly Glu His Arg Cys Ser Phe
65      70      75      80
Val Arg Ala Gly Tyr Pro Ala Ile Cys His Pro His Ala Ala Thr Gly
85      90      95
Ala Ala Phe Ser Gly His Pro
100

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<210> 1389
 <211> 4013

<212> DNA

<213> Homo sapiens

<400> 1389

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 120
 actgccatgc acaaccgctc cacagctgcc cccatcccca tcttgctga gagaggagt
 180
 tccctcttcc cctatggggc agacgccggg gacctggagt tcgtcaggag gaccgtggac
 240
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 420
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 480
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2820
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<210> 1390

<211> 1156

<212> PRT

<213> Homo sapiens

<400> 1390

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			20					25					30		
Thr	Ile	Ile	Ser	Thr	Ile	Pro	Ser	Thr	Ala	Met	His	Thr	Arg	Ser	Thr
			35					40					45		
Ala	Ala	Pro	Ile	Pro	Ile	Leu	Pro	Glu	Arg	Gly	Val	Ser	Leu	Phe	Pro
			50					55					60		
Tyr	Gly	Ala	Asp	Ala	Gly	Asp	Leu	Glu	Phe	Val	Arg	Arg	Thr	Val	Asp
65						70					75				80
Phe	Thr	Ser	Pro	Leu	Phe	Lys	Pro	Ala	Thr	Gly	Phe	Pro	Leu	Gly	Ser
						85									95
Ser	Leu	Arg	Asp	Ser	Leu	Tyr	Phe	Thr	Asp	Asn	Gly	Gln	Ile	Ile	Phe
			100					105					110		
Pro	Glu	Ser	Asp	Tyr	Gln	Ile	Phe	Ser	Tyr	Pro	Asn	Pro	Leu	Pro	Thr
			115					120					125		
Gly	Phe	Thr	Gly	Arg	Asp	Pro	Val	Ala	Leu	Val	Ala	Pro	Phe	Trp	Asp

130	135	140
Asp Ala Asp Phe Ser Thr	Gly Arg Gly Thr Thr	Phe Tyr Gln Glu Tyr
145	150	155
Glu Thr Phe Tyr Gly	His Ser Leu Leu Val	Gln Gln Ala Glu Ser
165	170	175
Trp Ile Arg Lys Ile Thr	Asn Asn Gly Gly Tyr	Lys Ala Arg Trp Ala
180	185	190
Leu Lys Val Thr Trp Val	Asn Ala His Ala Tyr	Pro Ala Gln Trp Thr
195	200	205
Leu Gly Ser Asn Thr Tyr	Gln Ala Ile Leu Ser	Thr Asp Gly Ser Arg
210	215	220
Ser Tyr Ala Leu Phe Leu	Tyr Gln Ser Gly Gly Met	Gln Trp Asp Val
225	230	235
Ala Gln Arg Ser Gly Asn	Pro Val Leu Met Gly Phe	Ser Ser Gly Asp
245	250	255
Gly Tyr Phe Glu Asn Ser	Pro Leu Met Ser Gln Pro	Val Trp Glu Arg
260	265	270
Tyr Arg Pro Asp Arg Phe	Leu Asn Ser Asn Ser	Gly Leu Gln Gly Leu
275	280	285
Gln Phe Tyr Arg Leu His	Arg Glu Glu Arg Pro	Asn Tyr Arg Leu Glu
290	295	300
Cys Leu Gln Trp Leu Lys	Ser Gln Pro Arg Trp Pro	Ser Trp Gly Trp
305	310	315
Asn Gln Val Ser Cys Pro	Cys Ser Trp Gln Gln Gly	Arg Arg Asp Leu
325	330	335
Arg Phe Gln Pro Val Ser	Ile Gly Arg Trp Gly Leu	Gly Ser Arg Gln
340	345	350
Leu Cys Ser Phe Thr Ser	Trp Arg Gly Gly Val Cys	Cys Ser Tyr Gly
355	360	365
Pro Trp Gly Glu Phe Arg	Glu Gly Trp His Val	Gln Arg Pro Trp Gln
370	375	380
Leu Ala Gln Glu Leu Glu	Pro Gln Ser Trp Cys	Cys Arg Trp Asn Asp
385	390	395
Lys Pro Tyr Leu Cys Ala	Leu Tyr Gln Gln Arg	Arg Pro His Val Gly
405	410	415
Cys Ala Thr Tyr Arg Pro	Pro Gln Pro Ala Trp Met	Phe Gly Asp Pro
420	425	430
His Ile Thr Thr Leu Asp	Gly Val Ser Tyr Thr Phe	Asn Gly Leu Gly
435	440	445
Asp Phe Leu Leu Val Gly	Ala Gln Asp Gly Asn Ser	Ser Phe Leu Leu
450	455	460
Gln Gly Arg Thr Ala Gln	Thr Gly Ser Ala Gln Ala	Thr Asn Phe Ile
465	470	475
Ala Phe Ala Ala Gln Tyr	Arg Ser Ser Ser Leu Gly	Pro Val Thr Val
485	490	495
Gln Trp Leu Leu Glu Pro	His Asp Ala Ile Arg	Val Leu Leu Asp Asn
500	505	510
Gln Thr Val Thr Phe Gln	Pro Asp His Glu Asp Gly	Gly Gly Gln Glu
515	520	525
Thr Phe Asn Ala Thr Gly	Val Leu Leu Ser Arg	Asn Gly Ser Glu Val
530	535	540
Ser Ala Ser Phe Asp Gly	Trp Ala Thr Val Ser	Val Ile Ala Leu Ser
545	550	555
Asn Ile Leu His Ala Ser	Ala Ser Leu Pro Glu	Tyr Gln Asn Arg

	565		570		575
Thr Glu Gly Leu	Leu Gly Val Trp Asn Asn Asn Pro Glu Asp Asp Phe				
	580		585		590
Arg Met Pro Asn Gly Ser Thr Ile Pro Pro Gly Ser Pro Glu Glu Met					
	595		600		605
Leu Phe His Phe Gly Met Thr Trp Gln Ile Asn Gly Thr Gly Leu Leu					
	610		615		620
Gly Lys Arg Asn Asp Gln Leu Pro Ser Asn Phe Thr Pro Val Phe Tyr					
	625		630		635
Ser Gln Leu Gln Lys Asn Ser Ser Trp Ala Glu His Leu Ile Ser Asn					
	645		650		655
Cys Asp Gly Asp Ser Ser Cys Ile Tyr Asp Thr Leu Ala Leu Arg Asn					
	660		665		670
Ala Ser Ile Gly Leu His Thr Arg Glu Val Ser Lys Asn Tyr Glu Gln					
	675		680		685
Ala Asn Ala Thr Leu Asn Gln Tyr Pro Pro Ser Ile Asn Gly Gly Arg					
	690		695		700
Val Ile Glu Ala Tyr Lys Gly Gln Thr Thr Leu Ile Gln Tyr Thr Ser					
	705		710		715
Asn Ala Glu Asp Ala Asn Phe Thr Leu Arg Asp Ser Cys Thr Asp Leu					
	725		730		735
Glu Leu Phe Glu Asn Gly Thr Leu Leu Trp Thr Pro Lys Ser Leu Glu					
	740		745		750
Pro Phe Thr Leu Glu Ile Leu Ala Arg Ser Ala Lys Ile Gly Leu Ala					
	755		760		765
Ser Ala Leu Gln Pro Arg Thr Val Val Cys His Cys Asn Ala Glu Ser					
	770		775		780
Gln Cys Leu Tyr Asn Gln Thr Ser Arg Val Gly Asn Ser Ser Leu Glu					
	785		790		795
Val Ala Gly Cys Lys Cys Asp Gly Gly Thr Phe Gly Arg Tyr Cys Glu					
	805		810		815
Gly Ser Glu Asp Ala Cys Glu Glu Pro Cys Phe Pro Ser Val His Cys					
	820		825		830
Val Pro Gly Lys Gly Cys Glu Ala Cys Pro Pro Asn Leu Thr Gly Asp					
	835		840		845
Gly Arg His Cys Ala Ala Leu Gly Ser Ser Phe Leu Cys Gln Asn Gln					
	850		855		860
Ser Cys Pro Val Asn Tyr Cys Tyr Asn Gln Gly His Cys Tyr Ile Ser					
	865		870		875
Gln Thr Leu Gly Cys Gln Pro Met Cys Thr Cys Pro Pro Ala Phe Thr					
	885		890		895
Asp Ser Arg Cys Phe Leu Ala Gly Asn Asn Phe Ser Pro Thr Val Asn					
	900		905		910
Leu Glu Leu Pro Leu Arg Val Ile Gln Leu Leu Leu Ser Glu Glu Glu					
	915		920		925
Asn Ala Ser Met Ala Glu Val Asn Ala Ser Val Ala Tyr Arg Leu Gly					
	930		935		940
Thr Leu Asp Met Arg Ala Phe Leu Arg Asn Ser Gln Val Glu Arg Ile					
	945		950		955
Asp Ser Ala Ala Pro Ala Ser Gly Ser Pro Ile Gln His Trp Met Val					
	965		970		975
Ile Ser Glu Phe Gln Tyr Arg Pro Arg Gly Pro Val Ile Asp Phe Leu					
	980		985		990
Asn Asn Gln Leu Leu Ala Ala Val Val Glu Ala Phe Leu Tyr His Val					

995										1000										1005																											
Pro	Arg	Arg	Ser	Glu	Glu	Pro	Arg	Asn	Asp	Val	Val	Phe	Gln	Pro	Ile	Pro	Arg	Asn	Asp	Val	Val	Phe	Gln	Pro	Ile	Pro	Arg	Asn	Asp	Val	Val	Phe	Gln	Pro	Ile												
1010										1015										1020																											
Ser	Gly	Glu	Asp	Val	Arg	Asp	Val	Thr	Ala	Leu	Asn	Val	Ser	Thr	Leu	Ser	Gly	Glu	Asp	Val	Arg	Asp	Val	Thr	Ala	Leu	Asn	Val	Ser	Thr	Leu	Ser	Gly	Glu	Asp	Val	Arg	Asp	Val	Thr	Ala	Leu	Asn	Val	Ser	Thr	Leu
1025										1030										1035										1040																	
Lys	Ala	Tyr	Phe	Arg	Cys	Asp	Gly	Tyr	Lys	Gly	Tyr	Asp	Leu	Val	Tyr	Lys	Ala	Tyr	Phe	Arg	Cys	Asp	Gly	Tyr	Lys	Gly	Tyr	Asp	Leu	Val	Tyr	Lys	Ala	Tyr	Phe	Arg	Cys	Asp	Gly	Tyr	Lys	Gly	Tyr	Asp	Leu	Val	Tyr
1045										1050										1055																											
Ser	Pro	Gln	Ser	Gly	Phe	Thr	Cys	Val	Ser	Pro	Cys	Ser	Arg	Gly	Tyr	Ser	Pro	Gln	Ser	Gly	Phe	Thr	Cys	Val	Ser	Pro	Cys	Ser	Arg	Gly	Tyr	Ser	Pro	Gln	Ser	Gly	Phe	Thr	Cys	Val	Ser	Pro	Cys	Ser	Arg	Gly	Tyr
1060										1065										1070																											
Cys	Asp	His	Gly	Gly	Gln	Cys	Gln	His	Leu	Pro	Ser	Gly	Pro	Arg	Cys	Cys	Asp	His	Gly	Gly	Gln	Cys	Gln	His	Leu	Pro	Ser	Gly	Pro	Arg	Cys	Cys	Asp	His	Gly	Gly	Gln	Cys	Gln	His	Leu	Pro	Ser	Gly	Pro	Arg	Cys
1075										1080										1085																											
Ser	Cys	Val	Ser	Phe	Ser	Ile	Tyr	Thr	Ala	Trp	Gly	Glu	His	Cys	Glu	Ser	Cys	Val	Ser	Phe	Ser	Ile	Tyr	Thr	Ala	Trp	Gly	Glu	His	Cys	Glu	Ser	Cys	Val	Ser	Phe	Ser	Ile	Tyr	Thr	Ala	Trp	Gly	Glu	His	Cys	Glu
1090										1095										1100																											
His	Leu	Ser	Met	Lys	Leu	Asp	Ala	Phe	Phe	Gly	Ile	Phe	Phe	Gly	Ala	His	Leu	Ser	Met	Lys	Leu	Asp	Ala	Phe	Phe	Gly	Ile	Phe	Phe	Gly	Ala	His	Leu	Ser	Met	Lys	Leu	Asp	Ala	Phe	Phe	Gly	Ile	Phe	Phe	Gly	Ala
1105										1110										1115										1120																	
Leu	Gly	Gly	Leu	Leu	Leu	Gly	Val	Gly	Thr	Phe	Val	Val	Leu	Arg	Leu	Gly	Gly	Leu	Leu	Leu	Gly	Val	Gly	Thr	Phe	Val	Val	Leu	Arg	Leu	Gly	Gly	Leu	Leu	Leu	Gly	Val	Gly	Thr	Phe	Val	Val	Leu	Arg			
1125										1130										1135																											
Phe	Trp	Gly	Cys	Ser	Gly	Ala	Arg	Phe	Ser	Tyr	Phe	Leu	Asn	Ser	Ala	Phe	Trp	Gly	Cys	Ser	Gly	Ala	Arg	Phe	Ser	Tyr	Phe	Leu	Asn	Ser	Ala	Phe	Trp	Gly	Cys	Ser	Gly	Ala	Arg	Phe	Ser	Tyr	Phe	Leu	Asn	Ser	Ala
1140										1145										1150																											
Glu	Ala	Leu	Pro														Glu	Ala	Leu	Pro														Glu	Ala	Leu	Pro										
1155																																															

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<210> 1391
<211> 481
<212> DNA
<213> Homo sapiens
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```

400> 1391
gtcgcacggca tgcaggtcca tgacaaggca accgacctca accgcctcgc ccagaagatc
60
ggcattgtgt tccacscagt gaaagccttc cgcacctca ccgtgctgga aaacgtgatg
120
ctggcgccgc gcaagtgct cggtaaaagc aagcagaagg ccgaggagct gggcggtccgg
180
caactgaccc acgtgggcct gagcgacaag ctcaagacct tcccgcana gctttccggc
240
ggccagacaac agcgcattgc gattgccggc gccctggcca tgcgcggga ctacatgctg
300
ttcgacgaag ccacctcgcc ccttgatccg cagttgtgtg gcgagtgctg ggacaccatg
360
cgcattgctc ccgaagacgc catgacctat gtcctggtga cccatgaaat ccgctttgcc
420
cgcgatgtgt ccgatccgct ggcgttcttt cgcaacggcc tggtgcaaga gatcgccgcg
480
c
481

```

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<210> 1392
<211> 160
<212> PRT
<213> Homo sapiens
```

<400> 1392
Val Asp Gly Ile Glu Val His Asp Lys Ala Thr Asp Leu Asn Arg Leu

```

      1           5           10           15
Arg Gln Lys Ile Gly Ile Val Phe Gln Gln Trp Asn Ala Phe Pro His
      20           25           30
Leu Thr Val Leu Glu Asn Val Met Leu Ala Pro Arg Lys Val Leu Gly
      35           40           45
Lys Ser Lys Gln Lys Ala Glu Glu Leu Ala Val Arg Gln Leu Thr His
      50           55           60
Val Gly Leu Ser Asp Lys Leu Lys Thr Phe Pro Ala Xaa Leu Ser Gly
      65           70           75           80
Gly Gln Gln Gln Arg Met Ala Ile Ala Arg Ala Leu Ala Met Ser Pro
      85           90           95
Asp Tyr Met Leu Phe Asp Glu Ala Thr Ser Ala Leu Asp Pro Gln Leu
      100          105          110
Val Gly Glu Val Leu Asp Thr Met Arg Met Leu Ala Glu Asp Gly Met
      115          120          125
Thr Met Val Leu Val Thr His Glu Ile Arg Phe Ala Arg Asp Val Ser
      130          135          140
Asp Arg Val Ala Phe Phe Arg Asn Gly Leu Val His Glu Ile Gly Ala
      145          150          155          160

```

<210> 1393

<211> 309

<212> DNA

<213> Homo sapiens

<400> 1393

```

cggcgcgccat cggcgcgggc cttgtgggat atggccatta ctgaggtgct ggcgggctac
60
tacgaaccgc acgaacacgc acaccgcaag ccgagtcgt tgtacggcgc ggtcaagatg
120
tgggcccttc tgcgccgtca gggcatcagg tggcccgctg cancggtgga ggcctcatg
180
cgggacaacc ggtggcgtgg ggtgaccgc cgtagaagg ttncgcacca ccacgctga
240
cccggtgcc gggcgagccc cggatctggt ggaccgccag ttccgctgc aggcgcccaa
300
caagttgct
309

```

<210> 1394

<211> 79

<212> PRT

<213> Homo sapiens

<400> 1394

```

Arg Pro Pro Ser Ala Arg Ala Leu Trp Asp Met Ala Ile Thr Glu Val
      1           5           10           15
Leu Ala Gly Tyr Tyr Glu Pro Asp Glu His Gly His Arg Lys Pro Glu
      20           25           30
Ser Leu Tyr Gly Ala Val Lys Met Trp Ala Leu Leu Arg Arg Gln Gly
      35           40           45
Ile Arg Trp Pro Ala Ala Xaa Val Glu Arg Leu Met Arg Asp Asn Arg
      50           55           60
Trp Arg Gly Val Thr Arg Arg Lys Lys Val Xaa His His Arg

```

65

70

75

<210> 1395

<211> 347

<212> DNA

<213> Homo sapiens

<400> 1395

accggtgggg ttcgtggtgg cctggttact ttttggcgcg agcgggtgtg tgtgggccgt
 60
 tatgacggta gtctggtggcg aaacgggtgct tgcgtttgtg cgccgtcaac gtggaagagc
 120
 ccagattett aaaggcggtc gcgatgttgc ccgggagaca agggccttgg ctggacgggt
 180
 gtcggtgggg gagatcccct cagttgcact agagcacgtg gccgatgacg tggaggtatt
 240
 ggctcaggct aggcgggctc atgcagtggg cggaagcgtt tccgacgccc tcattgccac
 300
 ctcccggcaa ccagggatgg ctggtctggt gccactagcc cagcgcg
 347

<210> 1396

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1396

Met	Thr	Val	Val	Val	Gly	Glu	Thr	Val	Leu	Val	Val	Val	Arg	Arg	Gln
1				5					10					15	
Arg	Arg	Arg	Ala	Gln	Ile	Leu	Lys	Gly	Gly	Arg	Asp	Val	Ala	Arg	Ala
			20					25					30		
Thr	Arg	Ala	Leu	Ala	Gly	Arg	Val	Ser	Val	Gly	Glu	Ile	Pro	Ser	Val
		35					40					45			
Ala	Leu	Glu	His	Val	Ala	Asp	Asp	Val	Glu	Val	Leu	Ala	Gln	Ala	Arg
		50				55					60				
Arg	Ala	His	Ala	Val	Gly	Gly	Ser	Val	Ser	Asp	Ala	Leu	Ile	Ala	Thr
65				70					75					80	
Ser	Arg	Gln	Pro	Gly	Met	Ala	Gly	Leu	Val	Pro	Leu	Ala	His	Ala	
				85					90					95	

<210> 1397

<211> 308

<212> DNA

<213> Homo sapiens

<400> 1397

caattgcgcg ggttactgca ggccaagatg cagatgatgt cggacaccaa tttctctgac
 60
 ctggcccgcg tcgcgattgc cgccactatc cattctccgg aacgcgcgca agacatggtc
 120
 aaccgcttga gcaaacgcga agaaggcttc acgcaatggg tacgtgccgc acaggacgat
 180
 ggtcgactgt cctgcagcga cccggcggtc gctgcccacc agatacaaa cctgtccaag
 240

gogttcgcct ttggccgca aatcacccctg ggccagccgg tgctggatgc cgccagccag
 300
 gccaacgt
 308

<210> 1398
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 1398
 Met Gln Met Met Ser Asp Thr Asn Phe Leu Asp Leu Ala Arg Val Ala
 1 5 10 15
 Ile Ala Ala Thr Ile His Ser Pro Glu Arg Ala Gln Asp Met Val Asn
 20 25 30
 Arg Leu Ser Lys Arg Glu Glu Gly Phe Thr Gln Trp Val Arg Ala Ala
 35 40 45
 Gln Asp Asp Gly Arg Leu Ser Cys Ser Asp Pro Ala Phe Ala Ala His
 50 55 60
 Gln Ile Gln Ser Leu Leu Lys Ala Phe Ala Phe Trp Pro Gln Ile Thr
 65 70 75 80
 Leu Gly Gln Pro Val Leu Asp Ala Ala Ser Gln Ala Asn
 85 90

<210> 1399
 <211> 539
 <212> DNA
 <213> Homo sapiens

<400> 1399
 gctagctaac atttatTTTT gtttttatta ttgttatcta gtggtaaaaa tttcttaagc
 60
 aatgaactga agtctagatt ttgagatgt agtcctttac tgattataaa gcaaatgcct
 120
 tttagatatt taacttcac agtactatct gtagtaggag gctgatttta ctaaaattag
 180
 ataattatat acatctgttc ctattccttt ggtaggacct ttaagaaagt catgctgaat
 240
 ctgagaatgc caggacattt cacgtggtat gaatgttaga tattcattta cacatcgctg
 300
 cacagacagc ctctatataa cccaccctgt tgggggtattg aattttttct tttccgcccc
 360
 tacttttaaa tottgtoatg taatttcaac acataatttg tggcacttta gtttttttac
 420
 cttttatagt ttaataactt atacatgtac atgcttaaaa tgtcaaacaa tacaatggg
 480
 aacaaagaaa attgcttcac catctgtgaa cccctccttt tgtagtcccc ttacacgct
 539

<210> 1400
 <211> 90
 <212> PRT
 <213> Homo sapiens

<400> 1400

```

Met Asn Val Gly Tyr Ser Phe Thr His Arg Cys Thr Asp Ser Leu Tyr
 1             5             10             15
Ile Thr His Pro Val Gly Val Leu Asn Phe Phe Ser Arg Pro Thr
      20             25             30
Phe Lys Ser Cys His Val Ile Ser Thr His Asn Leu Trp His Phe Ser
      35             40             45
Phe Phe Thr Leu Tyr Ser Leu Ile Thr Tyr Thr Cys Thr Cys Leu Lys
      50             55             60
Cys Gln Thr Ile Gln Met Gly Thr Lys Lys Ile Ala Ser Pro Ser Val
65             70             75             80
Asn Pro Ser Phe Cys Ser Pro Leu His Ala
      85             90

```

<210> 1401

<211> 653

<212> DNA

<213> Homo sapiens

<400> 1401

```

ttcgagggggt cacttgggact caagcttcgc gaagtcggcg acctcggacg accgattttt
60
cggctgtgca ccgtcaccgc aaggctggcg tgggttnnct catcacccgc gcgcgcatgg
120
ncattgggggt ttgatggcgc cgtttccctg ctgctgggcg cgtacctcat cgtcacccgc
180
ccaacgggtga ttaaccocat cctgcgtcag ttgcgtccta ccggcgaggt gagtgetctg
240
ttgaggtggg aaggaatcgt cgtcgatccg ctgcggccca tcctggcatt actggtgtat
300
caggccataa ccagcatcga ccgatcttcc atcggacaag gcgtcttgaa tctggggctc
360
accctattgg tcgggctgct ctctcctggc cccatcgggt ggatcgtcac cgcgatgatg
420
aaacggcacc tcattcccga ctccetacaa ggcgtgattt tcgttgggggt cgcgcttgga
480
acgtgtgttg gcgctaactg cattcgggag gaatcgggcc tggtcgcgtg tacgatgctc
540
ggcatctacc tggcgaaacca gcgcaacctc gagcttgagc ccgtcatcga gtccaaggaa
600
cacctgcagc tgctcctcgt tggcgtccta ttcacatcgc ttgcaggacg cgt
653

```

<210> 1402

<211> 217

<212> PRT

<213> Homo sapiens

<400> 1402

```

Phe Glu Gly Ser Leu Gly Leu Lys Leu Arg Glu Val Arg Asp Leu Gly
 1             5             10             15
Arg Pro Ile Phe Arg Leu Cys Thr Val Thr Ala Arg Leu Ala Trp Val
      20             25             30
Xaa Ser Ser Pro Ala Arg Arg Trp Xaa Leu Gly Phe Asp Gly Arg Val

```

```

          35              40              45
Ser Leu Leu Leu Gly Ala Ile Leu Ile Val Thr Gly Pro Thr Val Ile
  50              55              60
Asn Pro Ile Leu Arg Gln Leu Arg Pro Thr Arg Arg Val Ser Ala Leu
  65              70              75              80
Leu Arg Trp Glu Gly Ile Val Val Asp Pro Leu Gly Ala Ile Leu Ala
          85              90              95
Leu Leu Val Tyr Gln Ala Ile Thr Ser Ile Asp Arg Ser Ser Ile Gly
          100              105              110
Gln Gly Val Leu Asn Leu Gly Leu Thr Leu Leu Val Gly Leu Leu Phe
          115              120              125
Ala Gly Pro Ile Gly Trp Ile Val Thr Ala Met Met Lys Arg His Leu
          130              135              140
Ile Pro Asp Phe Leu Gln Gly Val Ile Phe Val Gly Val Ala Val Gly
          145              150              155              160
Thr Cys Val Gly Ala Asn Val Ile Arg Glu Glu Ser Gly Leu Val Ala
          165              170              175
Val Thr Met Leu Gly Ile Tyr Leu Ala Asn Gln Arg Asn Leu Glu Leu
          180              185              190
Glu Pro Val Ile Glu Phe Lys Glu His Leu Gln Val Leu Leu Val Gly
          195              200              205
Val Leu Phe Ile Met Leu Ala Gly Arg
          210              215

```

<210> 1403

<211> 393

<212> DNA

<213> Homo sapiens

<400> 1403

```

aagctttgca gtttcttggt atccaaatcc aggcgttctt ggtctttttc cacaacagtg
60
tgtgccacat gaaatggaac acgggcaaac atatctgac caggaacat tagccaagta
120
tgttctctgg ggtcatgac tccacaagtt gggcatatct cctttatcag ctgcttgcca
180
gagcttcctt ccatctcttt cattatgacc tcaaaggagg atggcacgct agtcttggac
240
gtcctagcct gtttccgaag ggctgtcaga gcctccctgt taccatttct tatcttatca
300
ttttccacca actgatgtct agccagaaga actttttctg catcagcttc aatatcaacc
360
agagctctt gaagctgctt catgttggga tcc
393

```

<210> 1404

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1404

```

Met Lys Gln Leu Gln Glu Ala Leu Val Asp Ile Glu Thr Asp Ala Glu
  1              5              10              15
Lys Val Leu Leu Ala Arg His Gln Leu Val Glu Asn Asp Lys Ile Arg

```

```

                20                25                30
Asn Gly Asn Arg Glu Ala Leu Thr Ala Leu Arg Lys Gln Ala Arg Thr
                35                40                45
Ser Lys Thr Ser Val Pro Ser Pro Phe Glu Val Ile Met Lys Glu Met
                50                55                60
Glu Gly Ser Ser Gly Lys Gln Leu Ile Lys Glu Ile Cys Pro Thr Cys
                65                70                75                80
Gly Asp His Asp Pro Lys Glu His Thr Trp Leu Met Phe Pro Gly Ser
                85                90                95
Asp Met Phe Ala Arg Val Pro Phe His Val Ala His Thr Val Val Glu
                100                105                110
Lys Asp Gln Glu Arg Leu Asp Leu Asp Thr Lys Lys Leu Gln Ser
                115                120                125

```

<210> 1405

<211> 421

<212> DNA

<213> Homo sapiens

<400> 1405

```

nncgcactgc acaaggccct gggcatcgaa ctgcccgccg cactgcaggt catcgtaaa
60
ggcgaaacca gctcgcaatg gctcgcccg gaagaaatggc tgctgatcgt gcccgagggt
120
gaagagttcg cgcgcgagca aaacctgctg gccgacctgg gcgagttgca tatccaggtc
180
gtcaacgtca gcggtggcca gcagatcttc gaactcagcg gcccgaaact ggcgcagctg
240
ctgatgaaat ccaccagcta cgacgtacac cccaacaact tcccggtggg caaggcggtg
300
ggcacgggtg tcgccaagtc gcaactggtg atccgccata ccgccaaga cacctgggaa
360
ctgctgatcc gtgcagctt ctcgattac tgggtgctgt ggttgacgga cgcggctgca
420
t
421

```

<210> 1406

<211> 140

<212> PRT

<213> Homo sapiens

<400> 1406

```

Xaa Arg Leu His Lys Ala Leu Gly Ile Glu Leu Pro Gly Ala Leu Gln
1                5                10                15
Val Ile Val Lys Gly Glu Thr Ser Leu Gln Trp Leu Gly Pro Asp Glu
                20                25                30
Trp Leu Leu Ile Val Pro Ser Gly Glu Glu Phe Ala Ala Glu Gln Asn
                35                40                45
Leu Arg Ala Ala Leu Gly Glu Leu His Ile Gln Val Val Asn Val Ser
                50                55                60
Gly Gly Gln Gln Ile Leu Glu Leu Ser Gly Pro Asn Val Arg Asp Val
                65                70                75                80
Leu Met Lys Ser Thr Ser Tyr Asp Val His Pro Asn Asn Phe Pro Val

```

	85		90		95										
Gly	Lys	Ala	Val	Gly	Thr	Val	Phe	Ala	Lys	Ser	Gln	Leu	Val	Ile	Arg
	100							105				110			
His	Thr	Ala	Glu	Asp	Thr	Trp	Glu	Leu	Leu	Ile	Arg	Arg	Ser	Phe	Ser
	115						120					125			
Asp	Tyr	Trp	Trp	Leu	Trp	Leu	Gln	Asp	Ala	Ala	Ala				
	130					135					140				

<210> 1407

<211> 1006

<212> DNA

<213> Homo sapiens

<400> 1407

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nnccggccggg agaagctgga gctcgtcctg tctaacctgc aggcagacgt cctggagttg
60
ctgctggagt ttgtctacac gggctccctg gtcctcgtc cgcccaacgc caagacactg
120
ctggaggcgg ccagcaagtt ccagttccac acctctctgca aagtctcgct gtcctttctt
180
gagaagcagc tgacggccag caactgcctg ggcgttgctg ccatggccga ggccatgcag
240
tgacgcgagc tctaccacat ngccaaggcc ttcgcgctgc agatcttccc cgagggtggc
300
gcccaggagg agatccctcag catctccaag gacgacttca tcgcctacgt ctccaacgac
360
agcctcaaca ccaaggctga ggagctgggt tacgagacag tcatcaagtg gatcaagaag
420
gaccgccgca cagcacaca gtacgcggct gagctcctgg ccgtgggtccg cctccccttc
480
atccacccca gctacctgct caatgtgggt gacaatgaag agctgatcaa gtcacagaa
540
gcctgccggg acctggtgaa cgaggccaaa cgctaccata tgctgcccca cgcccgccag
600
gagatgcaga cgccccgaac ccggccgcgc ctctctgcag gtgtgggtga ggtcatcgtc
660
ttggttgggg gccctcagat ggtggggatg acccagcgct cgctgggtggc cgtcacctgc
720
tggaaccgcg agaacaacaa gtgggtacccc ttggcctcgg tgcccttttt aggcccgga
780
ttcttcagtg tagtgagtgc aggggccaac atctacctct caggtgggat ggaatcaggg
840
gtgccgctgg ctgatgtctg gtgtacatg tccctgctgt ataactggaa cctcgtctcc
900
agatgcccag tcccccgctg tcggcccatc agcctcgctt acgatgggaa gatttacacc
960
ctcgggggac ttggcgtggc agggcaacgtg gaccacgtgg agagga
1006

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<210> 1408

<211> 335

<212> PRT

<213> Homo sapiens

<400> 1408

```

Xaa Gly Arg Glu Lys Leu Glu Leu Val Leu Ser Asn Leu Gln Ala Asp
 1              5              10              15
Val Leu Glu Leu Leu Leu Phe Val Tyr Thr Gly Ser Leu Val Ile
 20              25              30
Asp Ser Ala Asn Ala Lys Thr Leu Leu Glu Ala Ala Ser Lys Phe Gln
 35              40              45
Phe His Thr Phe Cys Lys Val Cys Val Ser Phe Leu Glu Lys Gln Leu
 50              55              60
Thr Ala Ser Asn Cys Leu Gly Val Ala Ala Met Ala Glu Ala Met Gln
 65              70              75              80
Cys Ser Glu Leu Tyr His Xaa Ala Lys Ala Phe Ala Leu Gln Ile Phe
 85              90              95
Pro Glu Val Ala Ala Gln Glu Glu Ile Leu Ser Ile Ser Lys Asp Asp
100              105              110
Phe Ile Ala Tyr Val Ser Asn Asp Ser Leu Asn Thr Lys Ala Glu Glu
115              120              125
Leu Val Tyr Glu Thr Val Ile Lys Trp Ile Lys Lys Asp Pro Ala Thr
130              135              140
Arg Thr Gln Tyr Ala Ala Glu Leu Leu Ala Val Val Arg Leu Pro Phe
145              150              155              160
Ile His Pro Ser Tyr Leu Leu Asn Val Val Asp Asn Glu Glu Leu Ile
165              170              175
Lys Ser Ser Glu Ala Cys Arg Asp Leu Val Asn Glu Ala Lys Arg Tyr
180              185              190
His Met Leu Pro His Ala Arg Gln Glu Met Gln Thr Pro Arg Thr Arg
195              200              205
Pro Arg Leu Ser Ala Gly Val Ala Glu Val Ile Val Leu Val Gly Gly
210              215              220
Arg Gln Met Val Gly Met Thr Gln Arg Ser Leu Val Ala Val Thr Cys
225              230              235              240
Trp Asn Pro Gln Asn Asn Lys Trp Tyr Pro Leu Ala Ser Val Pro Phe
245              250              255
Leu Gly Pro Gly Phe Phe Ser Val Val Ser Ala Gly Ala Asn Ile Tyr
260              265              270
Leu Ser Gly Gly Met Glu Ser Gly Val Pro Leu Ala Asp Val Trp Cys
275              280              285
Tyr Met Ser Leu Leu Asp Asn Trp Asn Leu Val Ser Arg Met Pro Val
290              295              300
Pro Arg Cys Arg Pro His Ser Leu Val Tyr Asp Gly Lys Ile Tyr Thr
305              310              315              320
Leu Gly Gly Leu Gly Val Ala Gly Asn Val Asp His Val Glu Arg
325              330              335

```

<210> 1409

<211> 279

<212> DNA

<213> Homo sapiens

<400> 1409

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nnnattgaagt tcttggtttt ttcagaaaaa cgcgcttttt gctatgctgg ccgccccgcg
60
gcacgagata gcaccatgca actgatcgat atcggcgctca acctgaccaa cagcagtttc
120

```

cacgaccaac aggccgcaat cgtcgagcgc gcgctggagg cggcggttac gcaaatgctg
 180
 ctgacaggca ccagcctggc ggtcagcgaa caagccctgg aactgtgcca tcaactggat
 240
 gcaagcggcg cccacctgtt cgccacggcc ggcgtgcac
 279

<210> 1410

<211> 93

<212> PRT

<213> Homo sapiens

<400> 1410

Xaa	Met	Lys	Phe	Leu	Val	Phe	Ser	Glu	Lys	Arg	Ala	Phe	Cys	Tyr	Ala
1				5					10				15		
Gly	Arg	Pro	Ala	Ala	Arg	Asp	Ser	Thr	Met	Gln	Leu	Ile	Asp	Ile	Gly
		20						25					30		
Val	Asn	Leu	Thr	Asn	Ser	Ser	Phe	His	Asp	Gln	Gln	Ala	Ala	Ile	Val
	35						40					45			
Glu	Arg	Ala	Leu	Glu	Ala	Gly	Val	Thr	Gln	Met	Leu	Leu	Thr	Gly	Thr
	50					55				60					
Ser	Leu	Ala	Val	Ser	Glu	Gln	Ala	Leu	Glu	Leu	Cys	His	Gln	Leu	Asp
65				70					75					80	
Ala	Ser	Gly	Ala	His	Leu	Phe	Ala	Thr	Ala	Gly	Val	His			
				85					90						

<210> 1411

<211> 321

<212> DNA

<213> Homo sapiens

<400> 1411

nnncgtattt caggaatgaa gaacgaacct gaatggatgc ttgaatggcg cttgagtgc
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 ttctgtgaat ggtagaaaat ggaagagcct agctgggctc atgtcgatta ccctaaaaatt
 120
 gattttcaat ctatttctta ctattccgcy ccaaaaagca tgaaggataa gcctaagtcg
 180
 ttagacgaag tcgatctga attgttacgt acttatgaaa aactgggcat tcctctcata
 240
 gaacagcaaa tgcttgctgg tatcgccgta gatgctgtct ttgactcagt gtctgtcggt
 300
 actacttttc gtcaaaagct t
 321

<210> 1412

<211> 107

<212> PRT

<213> Homo sapiens

<400> 1412

Xaa	Arg	Ile	Ser	Gly	Met	Lys	Asn	Glu	Pro	Glu	Trp	Met	Leu	Glu	Trp
1				5					10				15		
Arg	Leu	Ser	Ala	Phe	Arg	Glu	Trp	Leu	Glu	Met	Glu	Glu	Pro	Ser	Trp

```

                20                25                30
Ala His Val Asp Tyr Pro Lys Ile Asp Phe Gln Ser Ile Ser Tyr Tyr
                35                40                45
Ser Ala Pro Lys Ser Met Lys Asp Lys Pro Lys Ser Leu Asp Glu Val
                50                55                60
Asp Pro Glu Leu Leu Arg Thr Tyr Glu Lys Leu Gly Ile Pro Leu Ile
                65                70                75                80
Glu Gln Gln Met Leu Ala Gly Ile Ala Val Asp Ala Val Phe Asp Ser
                85                90                95
Val Ser Val Val Thr Thr Phe Arg Gln Lys Leu
                100                105

```

<210> 1413

<211> 385

<212> DNA

<213> Homo sapiens

<400> 1413

```

atgacccatg acgtcagcga agccgtggcg attgccgacc gggatgatcct gatcgaagac
60
ggcgaaatcg gcctcgacct gatcatcgac ctgccacgtc cgcgtgcccg tggttcacac
120
cgcttgcccg cgttggaagc cgaagtgata aaccgtgtgc tgcataaacc cngcacgaag
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<210> 1414

<211> 55

<212> PRT

<213> Homo sapiens

<400> 1414

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Val Ile Asn Arg Val Leu Ser
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<210> 1415

<211> 420

<212> DNA

<213> Homo sapiens

<400> 1415

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<211> 123

<212> PRT

<213> Homo sapiens

<400> 1416

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			20					25				30			
Glu	Lys	Ala	Pro	Val	Leu	Pro	Glu	Ser	Thr	Glu	Gly	Arg	Glu	Leu	Thr
		35					40				45				
Gln	Gly	Pro	Ala	Glu	Ser	Ser	Ser	Leu	Ser	Gly	Cys	Gly	Ser	Trp	Gln
	50				55					60					
Pro	Arg	Lys	Leu	Pro	Val	Phe	Lys	Ser	Leu	Arg	His	Met	Arg	Gln	Val
	65				70				75					80	
Leu	Gly	Ala	Pro	Ser	Phe	Arg	Met	Leu	Ala	Trp	His	Val	Leu	Met	Gly
			85					90					95		
Asn	Gln	Val	Ile	Trp	Lys	Ser	Arg	Asp	Val	Asp	Leu	Val	Gln	Ser	Ala
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<212> DNA

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